




Dr. Ajay K. Yadav

Title	Dr.	First Name	Ajay	Last Name	Yadav	Photograph
Designation		Asst. Professor & Prof. Ramalingaswami Fellow				
Address		Dr. B.R Ambedkar Center for Biomedical research, Delhi University, Delhi-07				
Phone No Office		27666272 ext: 258/102				
Residence		H No: 05, N Block Gopal Nagar, Najafgarh Delhi: 110043				
Mobile						
Email		www.ajay9774@gmail.com				
Web-Page		http://www.acbrdu.edu/AjayYadav.html				
Educational Qualifications						
Degree		Institution			Year	
Post Doctorate Fellow		Northwestern University, Chicago (USA)			2004 Nov. – Feb 2010	
Research Associate		National Institute Of Immunology, JNU Campus, New Delhi			2002 Nov. - 2004 Oct.	
Ph.D		Jamia Hamdard University, New Delhi			2003	
Career Profile						
Year		Position		Discipline /Institute		
Nov.2002- Oct 2004 N.I.I., JNU Campus New Delhi, India		Project Associate		Neuronal Signal Transduction		
Nov.2004- Aug 2007 Div. of Cancer Biology ENHRI, Evanston IL, U.S.A		Research Fellow		Breast Cancer biology		

Aug.2007- March 2010
Dept. of Neurosurgery,

Research AssociateOncogene/Tumor suppressor biology

Northwestern University
Chicago , IL. U.S.A

Fienberg School of Medicine,

April 2010- Cont.Assistant Professor& Prof. Ramalingaswami Fellow, University of Delhi

Administrative Assignments

- 1) Member Secretary- Institutional Human Ethical Committee, April2013 to Oct. 2017
- 2) **A.C.B.R, PhD Entrance Examination (Dept. Nodal Officer) - June to July 2016**
- 3) Member of Purchase Committee , (2010- 2016)
- 4) Additional Secretary - Human Ethical committee, (2011- 2012)
- 5) Member of Radiation safety, 2010- 2012
- 6) Coordinated M.Sc. Entrance Examination
- 7) Coordinated Summer Undergraduate Research Program (SURP), (2010- 2012)
- 8) Coordinated M. Sc. Semester Exams (May 2015)
- 9) Coordinator A.C.B.R (DU), M.Sc Practical Examination (May 2017)
- 10) Institutional Technical Committee, member (2016- onward)
- 11) Coordinator B. Sc Biomedical Science Examination (March 2018)
- 12) Nodal Officer A.C.B.R (DU), Coordinator M.Sc PhD Entance examination (May- June 2018)
- 13) Nodal Officer A.C.B.R (DU), Coordinator M.Sc Entrance Examination (May- June 2018)
- 14) Nodal Officer A.C.B.R (DU), Coordinator M.Sc PhD Entance examination (May- June 2019)
- 15) Nodal Officer A.C.B.R (DU), Coordinator M.Sc Entrance Examination (May- June 2019)

Areas of Interest / Specialization

Molecular oncology & cell signaling

My research interest toward the genome wide study to understand the cancer disease progression, which includes gene by gene analysis in search of multiple genetic aberration sites using system biology approach to identify the distinct set of genes required in all different perspective during cancer progression.

Following topics are ongoing in my present laboratory:

- 1) Cancer resistance development and therapeutic insights
- 2) Gene knock down approach to decipher out splice factor driven signal transduction pathway, and occurrence of novel alternative mRNA spliced variant.
- 3) Study more the cell line-based mouse xenograft tumor model. Clinical tissue sample are in use to correlate the aberration at proteome level.

Subjects Taught

Subject Theory classes taught since (July 2010 – onwards) :

- 1) **Cell Biology** – M.Sc 1stsemester as per syllabus(**Subject Coordinator**)
- 2) **Molecular Biology &Biotechnology** – M.Sc 2nd semester as per syllabus, till 2019
- 3) **Molecular oncology-** M.Sc 3rd semester syllabus, till 2016
- 4) **Recombinant DNA technology &Biotechnology(2020-New Syllabus):**M.Sc 2nd Semester, teaching as per syllabus structure (**Subject coordinator**)

Practical Classes (2010 – onwards):

Recombinant DNA technology &Biotechnology(2020 New Syllabus)– M.Sc.2nd semester syllabus (Subject Coordinator)

Research Guidance

Ph.D Guidance:

- 1) **Title: Response of chemotherapeutic drugs in glial tumor cell lines under varying oxygen concentration (Awarded)**
- 2) **Title: Study of circulatory MicroRNAs as biomarkers for diagnosis, prognosis and progression of breast cancer . (Awarded)**

Six- Month Dissertationcourse work andStudent Research training from my lab:

2012- 2013

- 1) 2- Student summer research program (M.Tech Students) (June - July)
- 2) 2- Student M. Tech Dissertation from Guatam Buddha University
- 3) 2- Students M. Sc Dissertation from ACBR, University of Delhi
- 4) 2- Research Fellow (trained for 6- 8 month)

2013-2014

- 1) 2- Student Summer research Program (June- July)
- 2) 1 M.Tech Student Dissertation from Amity University
- 3) 2- Students M Sc dissertation from ACBR, University of Delhi
- 4) 2- Research Assistant (trained for 6- 8 month)

2014-2015

- 1) 2- Student Summer Research Program (June - July)
- 2) 2- M Sc dissertation from A.C.B.R, University of Delhi
- 3) 1- Research Training (one year)

2015-2016

- 1) 2- Student Summer Research Program (June - July)
- 2) 2- M.Sc dissertation from A.C.B.R, University of Delhi
- 3) 1- Research Training (one year)

2016- 2017

- 1) 1- B.Tech dissertation (Feb – June 2017)
- 2) 1- M Sc Summer training (June- July 2017)
- 3) 2- Summer undergraduate trainee (SURP, June- July 2017)

2017- 2018

- 1) Three M.Sc dissertation from A.C.B.R, University of Delhi (Jan - April 2018)
- 2) One M.Sc dissertation from Bundelkhand University- (Jan- June 2018)
- 3) 2- Summer undergraduate Trainees (SURP, June –July 2018)

2018- 2019:

- 1) One M.Sc dissertation (ACBR, DU) student
- 2) Two INSA students
- 3) Two Summer Trainees

2019- 2020:

- 1) Three M.Sc Dissertation (A.C.B.R, DU) student (Dec 2019- May 2020)

Publications Profile

- 1) Vashishtha V, Jinghan N, **Yadav AK**. Antagonistic role of GSK3 isoforms in glioma survival. Apr 24;9(10):1846-1855. doi: 10.7150/jca.21248. eCollection 2018.PMID: 29805711, **J Cancer (2018)**
- 2) Jalota A, Kumar M, Das BC, **Yadav AK**, ChosdolK, Sinha S. A drug combination targeting hypoxia induced chemoresistance and stemness in glioma cells. Apr 6;9(26):18351-18366. doi: 10.18632/oncotarget.24839. eCollection 2018 Apr 6.**Oncotarget(2018)**
- 3) Thakur S, Grover RK, Gupta S, **Yadav AK**, Das BC. Identification of Specific miRNA Signature in Paired Sera and Tissue Samples of Indian Women with Triple Negative Breast Cancer. **PLoS One**. Jul 12;11(7):e0158946., (2016)
- 4) Akansha Jalota, Mukesh Kumar, Bhudev C. Das, **Ajay K. Yadav**, Kunzang Chosdol, Subrata Sinha. Synergistic increase in efficacy of a combination of 2-deoxy-d-glucose and cisplatin in normoxia and hypoxia: switch from autophagy to apoptosis. **Tumor Biol**. doi:10.1007/s13277-016-5089-8. (2016)
- 5) Roberto Ferrarese, Griffith R. Harsh IV, **Ajay K. Yadav**, Eva Bug et al., Lineage-specific splicing of a brain-enriched alternative exon promotes glioblastoma progression. **Journal of Clinical Investigation**, May 27. pii: 68836. doi: 10.1172/JCI68836. (2014)
Impact Factor: 14
- 6) **Ajay Yadav**, Vidhi Vashishtha, Nidhi Joshi, and Pankaj Taneja. AR-A 014418 Used against Gsk3beta down Regulates Expression of hnRNPA1 and SF2/ASF Splicing Factors. Journal of Oncology, doi: **10.1155/2014/695325**. Epub 2014 Jan 2. (2014)
- 7) Markus Bredel, Denise M. Scholtens, **Ajay K. Yadav**, Angel A. Alvarez, Jaclyn J. Renfrow et al. NFKBIA Deletion in Glioblastomas. **New Eng. Journal of Medicine**, Feb 17;364(7):627-37, (2011)
Impact Factor: 72
- 8) **Ajay K Yadav**, Anagh A Sahasrabuddhe, ManjariDimri, Prashant V Bommi, Rachana Sainger and Goberdhan P Dimri. Deletion analysis of BMI1 oncoprotein identifies its negative regulatory domain. **Mol. Cancer Jun 22;9:158 (2010)**
- 9) M.Bredel et al. A Network model of a cooperative landscape in Brain Tumor. (**JAMA-302(3) : 261-275, 2009.**)
- 10) **Yadav A et al**. Monosomy of Chromosome 10 associated with dysregulation of Epidermal Growth Factor Signalling in Glioblastoma. (**JAMA -- 302(3) : 276 -289, 2009**)
Impact Factor: 52
- 11) Guo WJ, Zeng MS, **Yadav A**, Song LB, Guo BH, Band V, Dimri GP. Mel-18 acts as a

tumor suppressor by repressing Bmi-1 expression and down-regulating Akt activity in breast cancer cells. **Cancer Res.** Jun 1;67(11):5083-9,2007 **Impact Factor: 8.0**

12) **Yadav A**, Kalita A, Dhillon S, Banerjee K. JAK/STAT3 pathway is involved in survival of neurons in response to insulin like growth factor and negatively regulated by suppression of cytokine signaling-3. **J. Biol. Chem.**, Vol. 280,36(9), pp- 31830-31840, 2005. **Impact Factor: 5.0**

13) Kenchappa P, **Yadav A**, Singh G, Nandana S, Banerjee K. Rescue of TNF – inhibited neuronal cells by IGF-1 involves Akt and c-Jun N-terminal kinases. **Journal of Neurosci. Res.**, Volume 76, Issue 4, p 466-474,15 May, 2004. **Impact Factor: 3.5**

14) **Yadav AK**, Paul BN, Naik S, Saxena AK, Patel DK. Human Hemaglobin shares the Bioactivities ascribed to Human Tumor Necrosis Factor- alpha. **Immunopharmacol. &Immonotoxicol.**, Vol-26, No-4, PP:1-14, 2004. **Impact Factor: 1.5**

15) Paul BN, Prakash A, Kumar S, **Yadav AK**, Mani U, Saxena AK, Sahu AP, Lal K, Dutta KK. Silica induced early fibrogenic reaction in lung of mice ameliorated by Nyctanthesarbortristisextract.**Biomed. Environ. Sci.**, Sep.; 15(3); 215-22, 2002. **Impact Factor: 1.5**

Conference Paper publication:

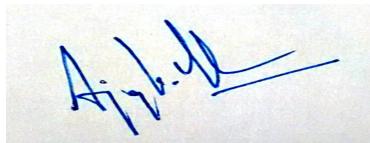
- 1) NFKBIA Deletion in Glioblastoma Multiforme. M Bredel, A Yadav, J Renfrow, D Scholtens, C Bredel, J Chandler et al. JOURNAL OF NEUROSURGERY 113 (2), A430-A430 (2010)
- 2) Deletion of NFKBIA in malignant gliomas. M Bredel, A Yadav, J Renfrow, D Scholtens, C Bredel et al. ASCO Annual Meeting Proceedings 28 (15_suppl), 2025 (2010)
- 3) Aberrant splicing of Brain-enriched alternative exon eliminates tumor suppressor function and oncogene function during brain tumorigenesis, M Bredel, R Ferrarese, GR Harsh, AK Yadav, Maticzka et al. Neuro-oncology 16 (suppl 3), iii19-iii20, (2014)
- 4) MTR-06A STRATEGY FOR REDUCING HYPOXIA INDUCED CHEMORESISTANCE IN GLIAL CELLS. A Jalota, BC Das, AK Yadav, K Chosdol, S Sinha. Neuro-Oncology 17 (suppl 5), v125-v125 (2015)
- 5) A combination of cisplatin and 2-deoxy-d glucose results in synergistic cell death in both normoxic and hypoxic conditions by attenuation of autophagy. A Jalota, BC Das, AK Yadav, K Chosdol, S Sinha. Cancer Research (Supplement), 1044-1044 (2015)
- 5) Ajay K. Yadav. DEUBIQUITINATING ENZYME (USP5) COOPERATE WITH RNA BINDING PROTEIN (hnRNPA1) DURING GLIOMA PROGRESSION, BRING THERAPEUTIC INSIGHTS. *Neuro-Oncology*, Volume 20, Issue suppl_6, 1 November 2018, Page vi49, <https://doi.org/10.1093/neuonc/now148.196>
- 6) [Ajay Yadav](#), [Vidhi Vashistha](#). GSK3 BETA AND hnRNPA1 (RNA BINDING PROTEIN) COOPERATES WITH cMyc TRANSCRIPTIONAL REGULATOR, ANTAGONIZES GSK3 ALPHA UNDER THERAPEUTIC STRESS. *Neuro-Oncology*, Volume 20, Issue suppl_6, 1 November 2018, Page vi78, <https://doi.org/10.1093/neuonc/now148.322>

Conference Organization/ Presentations (in the last three years)
<p>1) <i>Organizing Secretary in 11th Symposium on Frontiers in Biomedical Research, Challenges In Human Health: Prevention, Diagnosis and Cure. (Feb 19-21, 2018). Dr. B.R Ambedkar Center for Biomedical Research, University of Delhi.</i></p>
Major Research Projects:
<p>1) <i>“Study genetic variant in cancer disease progression” Prof Ramalingaswami Fellow (2010-2015) Department of Biotechnology, New Delhi Funded (Rs.70 lakhs)</i></p> <p>2) <i>Study the role of hnRNPA1 in glioma cell drug resistance development : DST-SERB funded(2016-2019) . Grant Rs. 5759000/-</i></p>
Awards and Distinctions
<p>1) Awarded Prof. Ramalingaswami Fellow (2010) from Dept of Biotechnology, New Delhi</p> <p>2) Travel Award for attending “American society for Cell Biology” (2009)</p>
Association With Professional Bodies NIL
<p>1) American Society of Cell Biology</p> <p>2) India Association for Cancer Research</p> <p>3) Society of Neuro-oncology</p>

Other Activities

Courseswork Attended:

- 1) **Refresher Course (9th Dec to 30th Dec 2014), organized by C.P.D.H.E, Delhi University**
- 2) **Orientation Course (8th June- 4 July, 2015), organized by C.P.D.H.E, Delhi University**
- 3) **Human Right Course (July 6- July 11, 2015) organized by C.P.D.H.E, Delhi University**
- 4) **Cancer Proteogenomics workshop (Sept 26- Sep 30, 2016), conducted byRajiv Gandhi Centre for Biotechnology, Tiruvunantpuran (Kerala), India and Broad Institute, Harvard, MIT, USA**
- 5) **Refresher Course (17th July to 6th August 2018), organized by CPDHE, University of Delhi**
- 6) **Refresher Course (28th June 2019 to 11th July 2019), Organized by CPDHE, University of Delhi**
- 7) **Gender Sensitization Course: 13th February 2020 to 19th February 2020**



7th July 2020

Signature of Faculty Member