**BIODATA**

1. **Name : Dr. Ritu Kulshreshtha**
2. **Designation: Assistant Professor**
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1. **Date of Birth:** 9 July, 1975
2. **Educational Qualification :** Degrees obtained (Begin with Bachelor’s Degree)

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| Sl No. | Degree Awarded | Institution/Place | Field of Study | Year |
| 1. | B.Sc. | Delhi University | Botany (H) | 1995 |
| 2. | M.Sc. | Delhi University | Plant Molecular Biology | 1997 |
| 3. | Ph.D. | Delhi University | Plant Molecular Biology | 2003 |
| 4. | Scientist | Center for Plant Molecular Biology, Delhi University | Molecular Biology | 2003 |
| 5. | Postdoctoral Research Fellow | Tufts-Medical Center, Boston, USA | MicroRNA. Hypoxia, Cancer | 2004-2008 |
| 6. | Postdoctoral Research Fellow | Harvard Medical School, Boston, USA | MicroRNA, DNA Repair | 2008 |
| 7. | Senior Research Associate (CSIR Pool Scientist Scheme) | School of Life Sciences, Jawaharlal Nehru University | Small RNA, cancer, Deep Sequencing | 2009 |
| 8. | Assistant Professor | Indian Institute of Technology, Delhi | Small RNA, Cancer, Hypoxia | 2010 |

1. **Research/Training Experience**

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| Sl No. | Duration | Institution | Particulars of Work Done |
| 4. | 2003 | Center for Plant Molecular Biology, Delhi University | **Scientist**  Molecular characterization of phytochrome gene family in wheat. |
| 5. | 2004-2008 | Tufts-Medical Center, Boston, USA | **Postdoctoral Research Fellow**  Role of microRNAs in Hypoxia Cancer Biology. |
| 6. | 2008 | Harvard Medical School, Boston, USA | **Postdoctoral Research Fellow**  Role of microRNAs in DNA damage and repair. |
| 7. | 2009 | School of Life Sciences, Jawaharlal Nehru University | **Senior Research Associate (CSIR Pool Scientist Scheme)**  Characterization of Small RNA transcriptome in leukemia patients through Deep Sequencing |
| 8. | 2010 | Indian Institute of Technology, Delhi | **Assistant Professor**  Role of microRNAs in pathogenesis of Solid tumors: Applications in cancer prognosis and therapy.  Role of microRNAs in hypoxia |

1. **Research specialization (Major scientific fields of interest)**

MicroRNA and Cancer Research, Hypoxia Cancer biology

1. **Important recent publications (last 5 years, with titles and References), including papers In press**

**Publications in last five years:**

###### Sharma S, Verma S, Vasudevan M, Samanta S, Thakur JK, Kulshreshtha R. The interplay of HuR and miR-3134 in regulation of AU rich transcriptome. RNA Biology, 10(8), 2013. Impact factor-4.93

###### Nagpal N, Ahmad HM, Molparia B, and Kulshreshtha R\*. MicroRNA-191, an estrogen responsive microRNA, functions as an oncogenic regulator in human breast cancer. Carcinogenesis. 2013 May 9. Impact Factor- 5.7

###### Srikantan S, Abdelmohsen K, Lee EK, Tominaga K, Subaran SS, Kuwano Y, Kulshrestha R, Panchakshari R, Kim HH, Yang X, Martindale JL, Marasa BS, Kim MM, Wersto RP, Indig FE, Chowdhury D, Gorospe M. Translational control of TOP2A influences doxorubicin efficacy. Mol Cell Biol. 2011 Sep;31(18):3790-801. Impact Factor- 5.527, Citations-19

###### Moskwa P, Buffa FM, Pan Y, Panchakshari R, Vischioni B, Gottipati P, Abdelmohsen K, Camps C, Ragoussis J, Kulshreshtha R, Weinstock DM, Parker A, Pezzella F, Gorospe M, Sharma RA, Helleday T, Harris AL, Chowdhury D. miR-182-mediated down-regulation of BRCA1 impacts on the DNA damage response and breast cancer therapy. Molecular Cell, 2011 Jan 21;41(2):210-20. Impact factor- 14.202, Citations- 78

# Vaz C, Ahmad HM, Sharma P, Gupta R, Kumar L, **Kulshreshtha R**, Bhattacharya A. Analysis of microRNA transcriptome by deep sequencing of small RNA libraries of peripheral blood. **BMC Genomics**, 2010, 11:288. **Impact Factor- 4.03, Citations-43**

# Pasquale Fasanaro, Simona Greco, Maria Lorenzi, Mario Pescatori, Maura Brioschi, **Ritu Kulshreshtha**, Cristina Banfi, Andrew Stubbs George A. Calin, Mircea Ivan, Maurizio C. Capogrossi, and Fabio Martelli. An integrated approach for experimental target identification of hypoxia-induced mir-210. **Journal of Biological Chemistry**, 2009, 284:35134-43, **Impact Factor- 4.8**, **Citations-75**

# Crosby M, **Kulshreshtha R**, Ivan M, Glazer PM. MicroRNA Regulation of DNA Repair Gene Expression in Hypoxic Stress. 2009. **Cancer Research**, 69:1221-9. **Impact Factor- 7.856, Citations- 160**

1. Ivan M, Harris AL, Martelli F**, Kulshreshtha R.** Hypoxia Response and microRNAs: No Longer Two Separate Worlds. 2008, **Journal of Cellular and Molecular Medicine**, 12:1426-31. **Impact Factor- 5.9, Citations 86**
2. **Kulshreshtha R**, Davaluri R, Calin GA, Ivan M. A microRNA Component of Hypoxic Regulation. 2008 **Cell Death and Differentiation**,15: 667-671. **Impact Factor- 8.849, Citations 111**
3. **Kulshreshtha R**, Ferracin M, Wojcik SE, Garzon R, Alder H, Agosto-Perez FJ, Davuluri R, Liu C-G, Croce CM, Negrini M, Calin GA and Ivan M. A MicroRNA Signature of Hypoxia. 2007. **Mol Cell Biol**., 27: 1859-1867. **Impact Factor- 5.527**

**\**Cited 430 times and ranked among the top 5 papers in MCB.***

1. **Kulshreshtha R**, Ferracin M, Negrini M, Calin GA, Davuluri RV, Ivan M. Regulation of microRNA expression: the hypoxic component. 2007 **Cell Cycle,** 6:1426-1431. **Impact Factor- 5.359 Citations 74**
2. **Kulshreshtha R**, Kumar N, Balyan HS, Gupta PK, Khurana P, Tyagi AK, Khurana JP. Structural characterization, expression analysis and evolution of the red/far-red sensing photoreceptor gene, phytochrome C (PHYC), localized on the ‘B’ genome of hexaploid wheat (Triticum aestivum L.), 2005. **Planta**, 221: 675-689. ***Impact Factor- 3.651* Citations 8**
3. Singh G, Jain M, **Kulshreshtha R**, Khurana JP, Kumar S, Singh P. Expression analysis of genes encoding translation initiation factor 3 subunit g (*TaeIF3g*) and vesicle-associated membrane protein-associated protein (*TaVAP*) in drought tolerant and susceptible cultivars of wheat. 2007. **Plant Science**. **Impact Factor- 2.922, Citations 2**
4. Khurana JP and **Kulshreshtha R.** Diversity in higher plant phytochromes and their molecular characteristics. (Invited Article). In: Souvenir-2nd International Congress of Plant Physiology, Jan 8-12, 2003, New Delhi, India, pp. 128-145.
5. **\*Financial support received**

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| Sl No. | Title of Project | Funding Agency | Amount  (Lakhs) | Duration of the project |
| 1. | Functional dissection of microRNAs frequently deregulated in solid cancers. | DST- Fast Track | Rs. 13.92 | Aug. 2010-Aug. 2013 |
| 2 | MicroRNAs and AU rich elements (ARE): Deciphering the regulatory loop | DBT-RGYI | Rs. 22.19 | March 2011- March, 2014 |
| 3. | Molecular Mechanisms of Hypoxia Resistance in Glioblastoma: Role of MicroRNAs | DBT- Call for Neurosciences | Rs. 65.97 | Sep 2011-Sep. 2014 |
| 4. | Investigating moduclation of miRNA expression in hypoxia-stem cell niche | DST-UKIERI | Rs 15.32 | 2013-2014 |