BUSHRA ATEEQ, Ph.D.

Associate Professor

Senior Fellow, Wellcome Trust/ DBT India Alliance Co-Editor-in-chief, *Translational Oncology (Elsevier)* Department of Biological Sciences & Bioengineering, The Mehta Family Centre for Engineering in Medicine,

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Education and Training:

01/1998 – 04/2003	Ph.D. (Genetics). Aligarh Muslim University, Aligarh, India. Advisor: Prof. Waseem Ahmad
07/2003 – 05/2004	Research Associate-DBT, Department of Biochemistry, All India Institute of Medical Sciences, New Delhi, India. Advisor: Prof. Neeta Singh
06/2004 — 05/2005	Research Associate-CSIR, National Institute of Immunology, New Delhi, India. Advisor: Prof. Amitabha Mukhopadhyay
06/2005 – 12/2007	Postdoctoral Research Fellow, McGill University, Montreal, Canada. Advisor: Prof. Shafaat A. Rabbani
01/2008 – 7/2011	Postdoctoral Research Fellow, Michigan Center for Translational Pathology, University of Michigan, Ann Arbor, MI. Advisor: Prof. Arul M. Chinnaiyan
Appointments:	,
08/2011-02/2013	Research Investigator, Michigan Center for Translational Pathology, Department of Pathology, University of Michigan, Ann Arbor, MI.
02/ 2013-04/2013	Visiting Faculty, Department of Biological Sciences and Bioengineering, Indian Institute of Technology Kanpur.
04/ 2013-06/2018	Assistant Professor, Department of Biological Sciences and Bioengineering, Indian Institute of Technology Kanpur.
06/2018-present	Associate Professor, Department of Biological Sciences and Bioengineering, Indian Institute of Technology Kanpur.

Research Interests:

- 1. Identify early diagnostic markers and therapeutic targets in cancers.
- 2. Identify genetic alterations in cancer and decipher their functional significance in tumorigenesis and drug resistance.
- 3. Develop new testing methods and targeted therapies using preclinical mouse models.

Awards and Honors:

- 1. Shanti Swarup Bhatnagar Prize for Science and Technology in Medical Sciences (2020) by the Council of Scientific and Industrial Research (CSIR), Government of India.
- 2. S. Ramachandran-National Bioscience Award for Career Development (2020-21) by the Department of Biotechnology (DBT), Government of India.
- 3. CSIR-Central Drug Research Institute Award (2020) for the excellence in Drug Research under Life Sciences category by CSIR-Central Drug Research Institute, Lucknow, India.
- 4. Basanti Devi Amir Chand Prize in Biomedical Sciences (2019) by the Indian Council of Medical Research (ICMR), Government of India.

- 5. Senior Fellowship Award from the Wellcome Trust/ DBT India Alliance (Sept 2020 Aug 2025).
- 6. CNR Rao Faculty Award for the Excellence in Research conferred by IIT Kanpur (2019)
- 7. Sayeeda Begum Women Scientist Prize (2019) for Excellence in Research conferred by Jamia Hamdard, New Delhi.
- 8. Outstanding Young Faculty PK Kelkar Research Award conferred by IIT Kanpur (2017)
- 9. Finalist of the NASI SCOPUS Young Scientist Award (2014) in Medicine category.
- 10. Intermediate Fellowship Award from the Wellcome Trust/ DBT India Alliance (May 2013 April 2019).
- 11. Ramanujan Fellowship from Department of Science and Technology, India (Declined, 2013).
- 12. Fast-Track Young Scientist Award from the Science and Engineering Research Board (SERB) 2013, Department of Science & Technology, Government of India.
- 13. AACR Women in Cancer Research Scholar Award (2011) at the annual meeting of American Association of Cancer Research, Orlando, FL.
- 14. Best Research Abstract Award at the Cancer Center Research Symposium (2010), University of Michigan, Ann Arbor, MI.
- 15. Young Investigator Award (2009) from Expedition Inspiration Fund for Breast Cancer Research, Ketchum, Idaho.
- 16. Genentech Postdoctoral Award (2009-2011) from the Genentech Foundation, South San Francisco, CA.
- 17. Postdoctoral Research Award (2006-2007) from Research Institute of McGill University Health Centre (MUHC), Montreal, Canada.
- 18. Fellowship Award (2006-2007) from Department of Medicine, McGill University, Montreal, Canada.
- 19. Research Award (2005-2006) by Canadian Institutes of Health Research (CHIR) for the strategic training program in Skeletal Health Research.
- 20. Research Associate Fellowship Award (2004-2005) by Council of Scientific and Industrial Research (CSIR), New Delhi.
- 21. Senior Research Fellowship Award (2002) from Council of Scientific and Industrial Research (CSIR), New Delhi.
- 22. University level Merit Scholarship in M.Sc. (1995-1997), Aligarh Muslim University, India.

Patents (Five):

- Inventors: Bushra Ateeq, Scott A. Tomlins, Arul M. Chinnaiyan. U.S. Patent. University of Michigan, "SPINK1 Targeted Therapy". Issued 09 Feb, 2011. Application Number 13/023, 694, UM-31362/US-2/ORD.
- 2. Inventors: **Bushra Ateeq**, Vipul Bhatia, Anjali Yadav. Indian Patent, Indian Institute of Technology, Kanpur. "Medicament and Diagnosis for SPINK1 Positive Cancer". Filed: 15th May, 2016. (Application Number: IN 201611016564).
- Inventors: Nitesh Kumar, Vivek Verma, Laxmidhar Behera, Kaustubh Kulkarni, Bushra Ateeq, Nishat Manzar. Indian Provisional Patent, Indian Institute of Technology, Kanpur 'Iron Oxide Nanoparticles and Method of its Production'. Filed: 15th May, 2017. (Application Number: 201711016919; granted). Registered Patent on January 25, 2021.
- 4. Inventors: **Bushra Ateeq**, Anjali Yadav. Indian Provisional Patent, Indian Institute of Technology, Kanpur. "Chemosensitization of castrate-resistant prostate cancer to PARP inhibitors by MALAT1 ablation". Filed: 17th August 2021 (Provisional Application Number: TEMP/E-1/41754/2021-DEL).

5. Inventors: **Bushra Ateeq**, Sakshi Goel. US Patent, Indian Institute of Technology, Kanpur. "Therapeutic interventions for targeting DLX1 in prostate cancer". (US patent application in process).

<u>Peer-reviewed Publications (*Corresponding author)</u>: Fifty-four

- Goel S, Bhatia V, Kundu S, Biswas T, Carskadon S, Gupta N, Asim M, Morrissey C, Palanisamy N, Ateeq B*. Transcriptional network involving ERG and AR orchestrates Distal-Less Homeobox-1 mediated prostate cancer progression. *Nature Communications*. 2021 Sep 7;12(1):5325. doi: 10.1038/s41467-021-25623-2. Impact Factor: 14.919.
- 2. Goel S, Bhatia V, Biswas T, **Ateeq B***. Epigenetic reprogramming during prostate cancer progression: A perspective from development. **Semin Cancer Biol.** 2021 Feb 2: S1044-579X (21)00023-7. Impact Factor: 14.564
- 3. Reddy CN, Manzar N, **Ateeq B**, Sankararamakrishnan R*. Computational Design of BH3-Mimetic Peptide Inhibitors That Can Bind Specifically to Mcl-1 or Bcl-XL: Role of Non-Hot Spot Residues. **Biochemistry.** 2020 Nov 4. doi: 10.1021/acs.biochem.0c00661. Impact Factor: 3.162
- Singh A, Srivastava N, Yadav A, Ateeq B*. Targeting AGTR1/NF-κB /CXCR4 axis by miR-155 attenuates oncogenesis in Glioblastoma. *Neoplasia*. 2020 Sep 4;22(10):497-510. doi: 10.1016/j.neo.2020.08.002. Impact Factor: 5.715
- 5. Tiwari R, Manzar N, **Ateeq B***. (2020) Dynamics of Cellular Plasticity in Prostate Cancer Progression. *Frontiers in Molecular Biosciences*. 2020 Jul 10;7:130. doi: 10.3389/fmolb.2020.00130. Impact Factor: 4.62.
- 6. Tiwari R[†], Manzar N[†], Bhatia V, Yadav A, Nengroo MA, Datta D, Carskadon S, Gupta N, Sigouros M, Khani F, Poutanen M, Zoubeidi A, Beltran H, Palanisamy N, **Ateeq B***. Androgen deprivation upregulates SPINK1 expression and potentiates cellular plasticity in prostate cancer. *Nature Communications*. 2020 Jan 20;11(1):384. [†]Co-first authors. Impact Factor: 14.919.
- 7. Bajpai A*, Ahmad QT, Tang HW, Manzar N, Singh V, Thakur A, **Ateeq B**, Perrimon N, Sinha P. A Drosophila model of oral peptide therapeutics for adult Intestinal Stem Cell tumors. *Disease Model Mech.* 2020 Jun 15: dmm.044420. doi: 10.1242/dmm.044420. Impact Factor: 5.758.
- 8. Agarwal AK*, Singh AP, Gupta T, Agarwal RA, Sharma N, Pandey SK, **Ateeq B**. Toxicity of exhaust particulates and gaseous emissions from gasohol (ethanol blended gasoline)-fuelled spark ignition engines. *Environ Sci Process Impacts*. 2020 Jul 22;22(7):1540-1553. Impact Factor: 4.238.
- 9. Singh V, Chatterjee S, Palecha M, Sen P, **Ateeq B**, Verma V*. Chickpea peel waste as sustainable precursor for synthesis of fluorescent carbon nanotubes for bioimaging application. *Carbon Letters*. 2020. https://doi.org/10.1007/s42823-020-00156-8. Impact Factor: 1.78.
- 10. Nur SM, Rath S, Ahmad V, Ahmad A, **Ateeq B**, Khan MI*. Nutritive vitamins as epidrugs. *Crit Rev Food Sci Nutr.* 2020 Feb 5:1-13. Impact Factor: 7.862
- 11. Gupta A, Nigam S, Avasthi I, Sharma B, **Ateeq B**, Verma S*. Caspase-3 mediated programmed cell death by a gold-stabilized peptide carbene. *Bioorganic & Medicinal Chemistry Letters*. 2019 Nov 1;29(21):126672. Impact Factor: 2.572

- 12. Nigam S, Manzar N, **Ateeq B***. Implications of the circular RNAs in localized prostate cancer. **Annals of Translational Medicine.** 2019 Sep;7(Suppl 6):S195. Impact Factor: 3.689
- Bhatia V, Ateeq B*. Molecular underpinnings governing genetic complexity of the ETS-fusion negative prostate cancer. *Trends in Molecular Medicine*. 2019 Nov;25(11):1024-1038. Impact Factor: 11.951
- 14. Bhatia V, Yadav A, Tiwari R, Nigam S, Goel S, Carskadon S, Gupta N, Goel A, Palanisamy N, Ateeq B*. Epigenetic silencing of miRNA-338-5p and miRNA-421 drives SPINK1-positive prostate cancer. Clinical Cancer Research. 2019 May 1;25(9):2755-2768. Impact Factor: 12.531. Commentary on this article: New Hope in Prostate Cancer Precision Medicine? miRNA Replacement and Epigenetics. Bjartell A. Clinical Cancer Research. 2019 May 1;25(9):2679-2681.
- Khan MI*, Hamid A, Rath S, Ateeq B, Khan Q, Siddiqui IA, Adhami VM, Choudhry H, Zamzami MA, Mukhtar H. AKT inhibition modulates H3K4 demethylase levels in PTEN null prostate cancer. *Mol Cancer Ther.* 2019 Feb;18(2):356-363. Impact Factor: 6.261
- Khan MI*, Al Johani A, Hamid A, Ateeq B, Manzar N, Adhami VM, Lall RK, Rath S, Sechi M, Siddiqui IA, Choudhry H, Zamzami MA, Havighurst TC, Huang W, Ntambi JM, Mukhtar H. Proproliferative function of adaptor protein GRB10 in prostate carcinoma. FASEB J. 2019 Mar;33(3):3198-3211. Impact Factor: 5.595
- 17. Agarwal AK*, Singh AP, Gupta T, Agarwal RA, Sharma N, Rajput P, Pandey SK, **Ateeq B**. Mutagenicity and Cytotoxicity of Particulate Matter Emitted from Biodiesel-Fueled Engines. *Environ Sci Technol.* 2018 Dec 18;52(24):14496-14507. Impact Factor: 7.149
- Kumar N, Tyeb S, Manzar N, Ateeq B, Behera L, Verma V*. Entropically Driven Controlled Release of Paclitaxel from Poly(2-ethyl-2-oxazoline) Coated Maghemite Nanostructures. Soft matter. 2018 Aug 21;14(31):6537-6553. Impact Factor: 3.709
- 19. Agarwal AK*, **Ateeq B**, Gupta T, Singh AP, Pandey SK, Sharma N, Agarwal RA, Gupta N, Sharma H, Jain A, Shukla PC. Higher Cytotoxicity and Mutagenicity of Particulate Emitted by Compressed Natural Gas Engine: A Myth or Reality? *Environmental Pollution*. 2018 Aug; 239:499-511. Impact Factor: 5.714
- Singh A, Srivastava N, Amit S, Prasad S, Misra M, Ateeq B*. Association of AGTR1 (A1166C) and ACE (I/D) polymorphisms with Breast Cancer risk in North Indian population. *Translational Oncology*. 2018 Apr;11(2):233-242. Impact Factor: 4.243
- 21. Mishra G, Bhattacharyya S, Bhatia V, **Ateeq B**, Sharma A, Sivakumar S*. Direct Intra-nuclear anticancer drug delivery via nuclear localization signal-free Polydimethylsiloxane nanoparticles: in vitro and in vivo xenograft studies. **ACS Applied Materials & Interfaces Reports.** 2017 Oct 11;9(40):34625-34633. Impact Factor: 8.456
- 22. Wang X, Qiao Y, Asangani IA, **Ateeq B**, Poliakov A, Cieslik M, Pitchiaya S, Chakravarthi BVSK, Cao X, Jing X, Wang CX, Apel IJ, Wang R, Tien JC, Juckette KM, Yan W, Jiang H, Wang S, Varambally S, Chinnaiyan AM*. Development of Peptidomimetic Inhibitors of the ERG Gene Fusion Product in Prostate Cancer. *Cancer Cell.* 2017 Apr 10;31(4):532-548.e7. Impact Factor: 31.743

- 23. Nunes JJ, Pandey SK, Yadav A, Goel S, **Ateeq B*.** Targeting NF-kappa B signaling by Artesunate restores sensitivity of castrate-resistant prostate cancer cells to anti-androgens. *Neoplasia*. 2017 Apr;19(4):333-345. Impact Factor: 5.715
- Agarwal RA*, Gupta NK, Singh R, Nigam S, Ateeq B. Ag/AgO Nanoparticles Grown via Time Dependent Double Mechanism in a 2D Layered Ni-PCP and Their Antibacterial Efficacy. Scientific Reports. 2017 Mar 21; 7:44852. Impact Factor: 4.525
- 25. **Ateeq B***, Bhatia V, Goel S. Molecular Discriminators of Racial Disparities in Prostate Cancer. *Trends in Cancer.* 2016 Mar;2(3):116-120. Impact Factor: 14.226
- Singh A, Nunes JJ, Ateeq B*. Role and Therapeutic Potential of GPCRs in Breast Cancer Progression and Metastases. *European Journal of Pharmacology*. 2015 Sep 15;763(Pt B):178-83. Impact Factor: 4.432
- 27. Tiwari R, Pandey SK, Goel S, Bhatia V, Shukla S, Jing X, Dhanasekaran SM, **Ateeq B***. SPINK1 promotes colorectal cancer progression by downregulating Metallothioneins expression. *Oncogenesis.* 2015 Aug 10;4:e162. Impact Factor: 6.119
- 28. Ateeq B*, Kunju LP, Carskadon SL, Pandey SK, Singh G, Pradeep I, Tandon V, Singhai A, Goel A, Amit S, Agarwal A, Dinda AK, Seth A, Tsodikov A, Chinnaiyan AM, Palanisamy N. Molecular Profiling of ETS and Non-ETS Aberrations in Prostate Cancer Patients from Northern India. Prostate. 2015 Jul 1;75(10):1051-62. Impact Factor: 4.104
- Khan AP, Rajendiran TM, Ateeq B, Asangani IA, Athanikar JN, Yocum AK, Mehra R, Siddiqui J, Palapattu G, Wei JT, Michailidis G, Sreekumar A, Chinnaiyan AM*. The role of sarcosine metabolism in prostate cancer progression. *Neoplasia*. 2013 May; 15(5):491-501. Impact Factor: 5.715
- Wu YM, Su F, Kalyana-Sundaram S, Khazanov N, Ateeq B, Cao X, Lonigro RJ, Vats P, Wang R, Lin SF, Cheng AJ, Kunju LP, Siddiqui J, Tomlins SA, Wyngaard P, Sadis S, Roychowdhury S, Hussain M, Feng FY, Zalupski MM, Talpaz M, Pienta KJ, Rhodes DR, Robinson DR, Chinnaiyan AM*. Identification of Targetable FGFR Gene Fusions in Diverse Cancers. *Cancer Discovery*. 2013 Jun;3(6):636-47. Impact Factor: 39.397
- 31. Asangani IA, **Ateeq B,** Cao Q, Dodson L, Pandhi M, Kunju LP, Mehra R, Lonigro RJ, Siddiqui J, Palanisamy N, Wu YM, Cao X, Kim JH, Zhao M, Qin ZS, Iyer MK, Maher CA, Kumar-Sinha C, Varambally S, Chinnaiyan AM. Characterization of the EZH2-MMSET histone methyltransferase regulatory axis in cancer. *Molecular Cell.* 2013 Jan 10;49(1):80-93. Impact Factor: 17.970
- Wang R, Asangani IA, Chakravarthi BV, Ateeq B, Lonigro RJ, Cao Q, Mani RS, Camacho DF, McGregor N, Schumann TE, Jing X, Menawat R, Tomlins SA, Zheng H, Otte AP, Mehra R, Siddiqui J, Dhanasekaran SM, Nyati MK, Pienta KJ, Palanisamy N, Kunju LP, Rubin MA, Chinnaiyan AM, Varambally S*. Role of Transcriptional Co-Repressor CtBP1 in Prostate Cancer Progression. Neoplasia. 2012 Oct;14(10):905-14. Impact Factor: 5.715
- 33. Grasso CS, Wu YM, Robinson DR, Cao X, Dhanasekaran SM, Khan AP, Quist MJ, Jing X, Lonigro RJ, Brenner JC, Asangani IA, **Ateeq B**, Chun SY, Siddiqui J, Sam L, Anstett M, Mehra R, Prensner JR, Palanisamy N, Ryslik GA, Vandin F, Raphael BJ, Kunju LP, Rhodes DR, Pienta KJ, Chinnaiyan AM*, Tomlins SA*. The Mutational Landscape of Lethal Castrate Resistant Prostate Cancer. *Nature*. 2012 Jul 12; 487(7406):239-43. Impact Factor: 42.778

- 34. **Ateeq B,** Vellaichamy A, Tomlins SA, Wang R, Cao Q, Lonigro RJ, Pienta KJ, Varambally S*. Role of Dutasteride in Pre-Clinical ETS- Fusion Positive Prostate Cancer Models. *Prostate.* 2012 Oct 1;72(14):1542-9. Impact Factor: 4.104
- 35. Robinson DR, Kalyana-Sundaram S, Wu YM, Shankar S, Cao X, Ateeq B, Asangani IA, Iyer M, Maher CA, Grasso CS, Lonigro RJ, Quist M, Siddiqui J, Mehra R, Jing X, Giordano TJ, Sabel MS, Kleer CG, Palanisamy N, Natrajan R, Lambros MB, Reis-Filho JS, Kumar-Sinha C, Chinnaiyan AM*. Functionally Recurrent Rearrangements of the MAST Kinase and Notch Gene Families in Breast Cancer. Nature Medicine. 2011 Nov 20; 17(12):1646-51. Impact Factor: 49.248
- 36. Cao Q, Mani RS, **Ateeq B,** Dhanasekaran SM, Asangani IA, Prensner JR, Kim JH, Brenner JC, Jing X, Cao X, Wang R, Li Y, Dahiya A, Wang L, Pandhi M, Lonigro RJ, Wu YM, Tomlins SA, Palanisamy N, Qin Z, Yu J, Maher CA, Varambally S, Chinnaiyan AM*. Coordinated Regulation of Polycomb Group Complexes Through microRNAs in Cancer. *Cancer Cell.* 2011 Aug 16; 20(2):187-99. Impact Factor: 31.743
- 37. Brenner JC*, Ateeq B*, Li Y, Yocum AK, Cao Q, Asangani IA, Patel S, Wang X, Liang H, Yu J, Palanisamy N, Siddiqui J, Yan W, Cao X, Mehra R, Sabolch A, Basrur V, Lonigro RJ, Yang J, Tomlins SA, Maher CA, Elenitoba-Johnson KS, Hussain M, Navone NM, Pienta KJ, Varambally S, Feng FY, Chinnaiyan AM*. Rationale for Inhibition of Poly (ADP-Ribose) Polymerase in ETS Gene Fusion Positive Prostate Cancer. *Cancer Cell.* 2011 May 17; 19(5):664-78. (*Equal contribution first author). Featured on Cover. Impact Factor: 31.743
- 38. **Ateeq B,** Tomlins SA, Laxman B, Asangani IA, Cao Q, Cao X, Li Y, Wang X, Feng FY, Pienta KJ, Varambally S, Chinnaiyan AM*. Therapeutic targeting of SPINK1-positive prostate cancer. **Science Translational Medicine.** 2011 Mar 2; 3(72):72ra17. Impact Factor: 17.161
- 39. Wang XS, Shankar S, Dhanasekaran SM, Ateeq B, Sasaki AT, Jing X, Robinson D, Cao Q, Prensner JR, Yocum AK, Wang R, Fries DF, Han B, Asangani IA, Cao X, Li Y, Omenn GS, Pflueger D, Gopalan A, Reuter VE, Kahoud ER, Cantley LC, Rubin MA, Palanisamy N, Varambally S, Chinnaiyan AM*. Characterization of KRAS Rearrangements in Metastatic Prostate Cancer. Cancer Discovery. 2011 Jun 1;1(1):35-43. Impact Factor: 39.397
- 40. Rabbani SA*, **Ateeq B**, Arakelian A, Valentino ML, Shaw DE, Dauffenbach LM, Kerfoot CA, Mazar AP. An anti-urokinase receptor (uPAR) antibody (ATN-658) blocks prostate cancer invasion, migration, growth and experimental skeletal metastasis in vitro and in vivo. **Neoplasia.** 2010 Oct. 12(10): 778–88. **Featured on Cover.** Impact Factor: 5.715
- 41. Palanisamy N*, Ateeq B*, Kalyana-Sundaram S*, Pflueger D, Ramnarayanan K, Shankar S, Han B, Cao Q, Cao X, Suleman K, Kumar-Sinha C, Dhanasekaran SM, Chen YB, Esgueva R, Banerjee S, LaFargue CJ, Siddiqui J, Demichelis F, Moeller P, Bismar TA, Kuefer R, Fullen DR, Johnson TM, Greenson JK, Giordano TJ, Tan P, Tomlins SA, Varambally S, Rubin MA, Maher CA, Chinnaiyan AM*. Rearrangements of the RAF kinase pathway in prostate cancer, gastric cancer and melanoma. *Nature Medicine*. 2010 Jul; 16 (7):793-8. (*Equal contribution first author). [Faculty of 1000 Biology: Recommended]. Impact Factor: 49.248
- 42. **Ateeq B,** Tomlins SA, Chinnaiyan AM*. AGTR1 as a therapeutic target in ER-positive and ERBB2-negative breast cancer cases. *Cell Cycle.* 2009 Dec; 8(23):3794-5. Impact Factor: 3.304.

- 43. Rhodes DR, **Ateeq B**, Cao Q, Tomlins SA, Mehra R, Laxman B, Kalyana-Sundaram S, Lonigro RJ, Helgeson BE, Bhojani MS, Rehemtulla A, Kleer CG, Hayes DF, Lucas PC, Varambally S, Chinnaiyan AM*. AGTR1 over-expression defines a subset of breast ancer and confers sensitivity to losartan, an AGTR1 antagonist. *Proc Natl Acad Sci USA.* 2009 Jun 23; 106(25):10284-9. (*Equal contribution first author). Impact Factor: 11.205
- 44. Varambally S, Cao Q, Mani RS, Shankar S, Wang X, **Ateeq B**, Laxman B, Cao X, Jing X, Ramnarayanan K, Brenner JC, Yu J, Kim JH, Han B, Tan P, Kumar-Sinha C, Lonigro RJ, Palanisamy N, Maher CA, Chinnaiyan AM*. Genomic loss of microRNA-101 leads to overexpression of histone methyltransferase EZH2 in cancer. **Science.** 2008, 12;322(5908):1695-9. [Faculty of 1000 Biology: Exceptional]. Impact Factor: 41.845
- 45. **Ateeq B,** Unterberger A, Szyf M, Rabbani SA*. Pharmacological inhibition of DNA methylation induces pro-invasive and pro-metastatic genes in vitro and in vivo. *Neoplasia*. 2008; 10(3):266-78. Impact Factor: 5.715
- 46. Sen S, **Ateeq B**, Sharma H, Datta P, Gupta SD, Bal S, Kumar A, Singh N*. Molecular profiling of genes in squamous cell lung carcinoma in Asian Indians. *Life Sciences*. 2008; 82(13-14):772-9. Impact Factor: 3.448
- 47. **Ateeq B***, Abul Farah M, Ahmad W. Evidence of apoptotic effects of 2,4-D and butachlor on walking catfish, Clarias batrachus, by transmission electron microscopy and DNA degradation studies. *Life Sciences*. 2006;78(9):977-86. Impact Factor: 3.448
- Farah MA, Ateeq B, Ahmad W*. Antimutagenic effect of neem leaves extract in freshwater fish, Channa punctatus evaluated by cytogenetic tests. Science of Total Environment. 2006; 364(1-3):200-14. Impact Factor: 5.589
- 49. **Ateeq B***, Farah MA, Ahmad W. Detection of DNA damage by single cell gel electrophoresis in 2,4-D and butachlor exposed erythrocytes of Clarias batrachus. *Ecotoxicology and Environmental Safety*. 2005 Nov;62(3):348-54. Impact Factor: 4.527
- 50. Farah MA, **Ateeq B**, Ali MN, Sabir R, Ahmad W*. Studies on lethal concentrations and toxicity stress of some chlorinated xenobiotics on non–target organisms. **Chemosphere**. 2004 Apr;55(2):257-65. Impact Factor: 5.108
- 51. Farah MA, **Ateeq B**, Ali MN, Ahmad W*. Evaluation of genotoxicity of PCP and 2,4-D by micronucleus test in freshwater fish Channa punctatus. *Ecotoxicology and Environmental Safety*. 2003 Jan;54(1):25-9. Impact Factor: 4.527
- 52. **Ateeq B**, Farah MA, Ali MN, Ahmad W*. Induction of micronuclei and erythrocyte alterations in the catfish Clarias batrachus by 2,4-dichlorophenoxyacatic acid and butachlor. *Mutation Research*. 2002 Jul 25;518(2):135-44. Impact Factor: 3.680
- 53. **Ateeq B**, Farah MA, Ali MN, Ahmad W*. Clastogenicity of pentachlorophenol, 2, 4-D and butachlor evaluated by Allium root tip test. *Mutation Research*. 2002 Feb 15;514(1-2):105-13. Impact Factor: 3.680
- 54. Ahmad W*, Ali MN, Farah MN, **Ateeq B**. Computerized automated morphometric assay including frequency estimation of pentachlorophenol induced nuclear anomalies (micronuclei) in catfish *Heteropneustes fossilis*. **Chromosoma**. 2002 Feb;110(8):570-4. Impact Factor: 4.021

Book Chapter: Title: "Cancer Genomics and Precision Medicine: a way towards early diagnosis and effective cancer treatment". Authors: Ritika Tiwari, **Bushra Ateeq*** (2016); Book Title: **Genome Analysis and The Human Health**; Rawal L., Ali S. (eds.) Publisher: Springer; ISBN: 978-981-10-4297-3.

National Level Administrative Assignments:

- 1. Co-Opt Task-force member (2019-22) of the Program Advisory Committee on Interdisciplinary Biological Sciences (PAC-IBS) under Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India.
- 2. Task-force member (2019-2020) of the Health Sciences discipline in the Empowerment and Equity Opportunities for Excellence in Science (EMEQ) scheme under Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India.
- 3. Member Expert Committee (Nov 2020) for the CSIR Head Quarter Coordinated Projects, Indian Breast Cancer Genome Atlas and Pan-CSIR Cancer Biology program focused on Breast and Gynecological cancers.
- 4. Task-force member (2019-2021) of the SERB-SUPRA (Scientific and Useful Profound Research Advancement) scheme under Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India.
- 5. Member Selection Committee (Dec 2020) for Department of Science & Technology (DST) Ministry of Science and Technology, Government of India, Level 2 Screening Committee-Assessment Board in connection with in-situ promotion to the Departmental Scientists under Modified Flexible Complementing Scheme.
- 6. Member Review Committee (14th-17th December 2020) DBT Ramalingaswami Re-entry Fellowship Program, Department of Biotechnology (DBT), Ministry of Science and Technology, Government of India.
- 7. Member of Jury (2020-21) for the Inspiring Science Award (TNQ) for the best published scientific paper in the Life Sciences from India.
- 8. Member project review committee (2019-2021) of the Health Sciences discipline in the Empowerment and Equity Opportunities for Excellence in Science (EMEQ)-SERB, Department of Science and Technology, Government of India.
- 9. Member project review committee (2021) of the PAC- Biophysics, Biochemistry, Molecular Biology and Microbiology, SERB, Department of Science and Technology, Government of India.
- 10. Member of the Advisory board for the Bharathiar University Cancer Theranostics Centre, Rashtriya Uchchatar Shiksha Abhiyan (RUSA 2.0), Bharathiar University, Coimbatore.
- 11. Expert chairperson during GYTI Conclave for the session on the Health care Drug Delivery and Nano Sciences- challenges & way forward on September 14-15, 2021.
- 12. Nodal person for Gender Advancement for Transforming Institutions (GATI) pilot initiative under DST, WISE-KIRAN program (2021 2022).

Invited Reviewer for the Extramural Grants/ Research Proposals:

- 1. Invited reviewer for the research proposals submitted to the Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India.
- 2. Invited reviewer for the Biomedical Research proposals submitted to the Department of Biotechnology, Ministry of Science, Government of India.
- 3. Invited reviewer for the "Early Career" and "Research Training Fellowship for Clinicians" in Biomedical Research under Wellcome Trust/ DBT India Alliance Fellowship.
- 4. Invited reviewer for the Scheme for Promotion of Academic and Research Collaboration (SPARC), MHRD, Government of India.
- 5. Invited reviewer for the SIDBI Innovation & Incubation Centre (SIIC), IIT Kanpur.
- 6. Invited reviewer for the Uchchatar Avishkar Yojana, Government of India.
- 7. Invited reviewer for the IMPacting Research INnovation and Technology (IMPRINT) under MHRD, Government of India.

International Assignments:

- 1. **Section Editor** (co-Editor in-chief) of **Translational Oncology** (Elsevier). **Translational Oncology** is a part of Elsevier's Oncology Journal Network. Impact factor: 4.243
- 2. Member of the Editorial Board of Toxicogenomics (specialty section of *Frontiers in Genetics*, *Frontiers in Oncology* and *Frontiers in Environmental Science*).
- 3. Delivered invited webinars organized by the Prostate Cancer Foundation (PCF), a United States-based foundation, Santa Monica, CA. (Prof. Jonathan W. Simons, President and CEO).

Extra-mural Sponsored Grants [Sanctioned]:

- Sponsor: Wellcome Trust/DBT India Alliance Senior Fellowship [IA/S/19/2/504659]. Title: Integrative
 Molecular Profiling of Prostate Cancer: Identification of molecular signature for risk stratification and
 advanced-stage disease management. Amount: 4.48 Crores; Project Duration: 01/09/2020 –
 31/08/2025; Role: Principal Investigator.
- Sponsor: SERB-POWER, Department of Science & Technology [SPG/2021/000851]. "Decipher the oncogenic potential and mechanistic circuitry involved in upregulation of Dyskerin pseudouridylate synthase (DKC1) in colorectal cancer. Amount: 56.5 lacs; Project Duration: 25th June 2021 24th June 2024; Role: Principal Investigator.
- 3. **Sponsor:** Department of Biotechnology; S. Ramachandran-National Bioscience Award for Career Development (2020-21) [BT/HRD/NBA/NWB/39/2020-21]. **Title:** Deciphering EGFR-independent SPINK1-mediated oncogenesis and its significance in neuroendocrine prostate cancer. **Amount:** 15 lacs; **Project Duration:** 30th June 2021 29th June 2024; **Role:** Principal Investigator.
- Sponsor: Department of Science & Technology-KIRAN [DST/KIRAN/GE-1/2019-13]. Title: Gender Advancement for Transforming Institutions (GATI) Pilot Study Initiative. Amount: 7.99 lacs; Project Duration: 28th June 2021 – 27th Dec 2022; Role: Principal Investigator.
- Sponsor: SERB, Department of Science & Technology [EMR/2016/006723]. Title: Modelling Squamous Cell Carcinoma (SCC) in Drosophila Male Accessory Gland (Mag). Amount: 33.90 lacs; Project Duration: July 2018 July 2021; Role: Co-Principal Investigator (PI: Prof. Pradip Sinha). CLOSED SUCCESSFULLY.

- 6. **Sponsor:** Wellcome Trust/DBT India Alliance Intermediate Fellowship [IA/I(S)/12/2/500635]. **Title:** Role of SPINK1 in Cancer Progression: Regulatory Mechanisms and Therapeutic Target Potential. **Amount:** 3.45 Crores; **Project Duration:** 01/05/2013 30/04/2018; **Role:** Principal Investigator. CLOSED SUCCESSFULLY.
- 7. **Sponsor:** Department of Biotechnology [BT/PR8675/GET/119/1/2015]. **Title:** Investigation of potential regulatory mechanism involved in AGTR1 mediated breast cancer progression and metastasis. **Amount:** 72.55 Lacs; **Project Duration:** 2016 2019; **Role:** Principal Investigator. CLOSED SUCCESSFULLY.
- 8. **Sponsor:** SERB, Department of Science & Technology [EMR/2016/005273]. **Title:** Investigate the role of Distal-Less Homeobox-1 in transdifferentiation of prostate cancer cells and neoplastic progression. **Amount:** 69.26 lacs; **Project Duration:** July 2017 June 2020; **Role:** Principal Investigator. CLOSED SUCCESSFULLY.
- Sponsor: SERB-VAJRA (Visiting Advanced Joint Research) Faculty Scheme [VJR/2017/000112]. Title: Understanding the role of androgen suppressed factors in Castration Resistant Prostate Cancer. Hosted Dr. Mohammad Asim, University of Surrey, UK. Amount: 10.65 lacs; Project Duration: July 2018 July 2019; Role: Co-Principal Investigator. CLOSED SUCCESSFULLY.
- Sponsor: Department of Science & Technology-Fast Track Young Scientist Scheme [SB/YS/LS-35/2013]. Title: Investigate potential mechanism involved in AGTR1 mediated oncogenic effects: a pharmaceutical intervention for treatment of AGTR1 positive breast cancer. Amount: 24 lacs; Project Duration: 01/10/2013 30/09/2016; Role: Principal Investigator. CLOSED SUCCESSFULLY.

Invited Adhoc Reviewer for the Scientific Journals:

- 1. Cell Report (Cell Press)
- 2. Oncogene (Nature Publishing Group)
- 3. Cancer Research (American Association for Cancer Research, AACR Journal)
- 4. Clinical Cancer Research (AACR Journal)
- 5. Molecular Cancer Therapeutics (AACR Journal)
- 6. Molecular Cancer Research (AACR Journal)
- 7. International Journal of Cancer (Wiley)
- 8. Oncotarget (Impact Journals)
- 9. FEBS Journal (Wiley-Blackwell)
- 10. Clinical Chemistry (American Association for Clinical Chemistry)
- 11. BMC Urology (BioMed Central)
- 12. Tumor Biology (Springer Netherlands)
- 13. Scientific Reports (Nature Publishing Group)
- 14. Biochemistry and Applied Biotechnology (Wiley-Blackwell)
- 15. Journal of Genetics (Springer Netherlands)
- 16. Mutation Research (Elsevier Journal)
- 17. Chemosphere (Elsevier Journal)
- 18. Life Sciences (Elsevier Journal)
- 19. PLOS One
- 20. Biology of the Cell (Wiley-Blackwell)
- 21. BMC Cancer (BioMed Central)
- 22. Annals of the Brazilian Academy of Sciences

Date: 27th September 2021

- 23. Aging (Impact Journals)
- 24. Journal of Visualized Experiments (JoVE)
- 25. Epigenomics (Future Medicine)
- 26. ACS Applied Materials & Interfaces
- 27. Endocrine Research (Taylor and Francis group)

Detailed information on peer-review assignments is available on: https://publons.com/researcher/1302529/bushra-ateeg/peer-review/

Bushra Ateeq IIT Kanpur

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