Curriculum Vitae

Name	**Dr. Akhilendra Kumar Maurya**
Designation	**Assistant professor**
Affiliation	Biochemistry & Molecular Biology Unit Department of Zoology Institute of Science Banaras Hindu University, Varanasi-221005, India
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Position held

- **Assistant Professor -** Department of Zoology, Institute of Science, Banaras Hindu University, Varanasi, 2020-present
- **Post Doctoral Fellow-** National Cancer Institute, National Institute of Health, Bethesda, MD, USA, 2019- 2020
- **Post Doctoral Research Associate** – University of Colorado Denver, CO, USA, 2017-2019

Academic qualifications

- **Ph.D.** Banaras Hindu University, Varanasi, India.
  Thesis title- ***"Modulation of PI3K-AKT Signaling by Quercetin in Lymphoma"***
- **M.Sc.** C.S.J.M. University, Kanpur, India.
  Project title- ***"Molecular Diagnosis of Hepatitis-B virus by Cobas Amplicor"***
- **B.Sc.** V.B.S.P. University, Jaunpur, India.

Publications

1. Kumar R, **Maurya AK**, Parker KD, Kant R, Ibrahim H, Kabir MI, Kumar D, Weber AM, Agarwal R, Kuhn KA, Ryan EP, Raina K (2022) Gender-based effect of absence of gut microbiota on the protective efficacy of Bifidobacterium longum-fermented rice bran diet against inflammation-associated colon tumorigenesis. Molecular Carcinogenesis, 1–17. **IF= 4.8**
2. Paudel S, Raina K, Tiku VR, **Maurya AK**, Orlicky DJ, You Z, Rigby CM, Deep G, Kant R, Raina B, Agarwal C, and Agarwal R (2022) Chemopreventive Efficacy of Silibinin against Basal Cell Carcinoma Growth and Progression in UVB-irradiated Ptch+/- mice. **Carcinogenesis**. **IF= 5.00**
3. Parker KD, **Maurya AK**, Ibrahim H, Rao S, Hove PR, Kumar D, Kant R, Raina B, Agarwal R, Kuhn KA, Raina K, Ryan EP (2021) Dietary rice bran-modified human gut

microbial consortia confers protection against colon carcinogenesis following fecal transfaunation. **Biomedicines**, 9(2):144. **IF= 6.081**

4. Nealon NJ, Parker KD, Lahaie P, Ibrahim H, **Maurya AK**, Raina K and Ryan EP (2019) *Bifidobacterium longum*-fermented rice bran and rice bran supplementation affects the gut microbiome and metabolome, **Beneficial Microbes**, 10(8): 823-839. **IF= 5.050**
5. Vinayak M and **Maurya AK** (2019) Quercetin loaded Nanoparticles in Targeting Cancer: Recent Development. **Anti-Cancer Agents in Medicinal Chemistry**, 19 (13): 1560-1576. **IF= 2.505**
6. Umrao S, **Maurya AK**, Shukla V, Grigoriev A, Ahuja R, Vinayak M, Srivastava RR, Saxena PS, Oh IK, Srivastava A (2019) Anti-carcinogenic Activity of Blue Fluorescent h-BN Quantum Dots: As an Effective Enhancer for DNA Cleavage Activity of Anti-cancer Drug Doxorubicin, **Materials Today Bio**, doi.org/10.1016/j.mtbio.2019.01.001. **IF= 10.761**
7. **Maurya AK** and Vinayak M (2018) Improved Synergistic Anticancer Efficacy of Quercetin in Combination with PI-103, Rottlerin and G0 6983 against MCF-7 and RAW 264.7 Cells, **In Vitro Cellular & Developmental Biology-Animal**, 55(1):36-44. **IF= 2.416**
8. Yadav MK, **Maurya AK**, Rajput G, Manar KK, Vinayak M, Drew MGB and Singh N (2017) Synthesis, characterization, DNA binding and cleavage activity of homoleptic zinc (II) β oxodithioester chelate complexes, **Journal of Coordination Chemistry**, 70:18, 3171-3185. **IF= 1.751**
9. **Maurya AK** and Vinayak M (2017) Quercetin attenuates cell survival, inflammation and angiogenesis via modulation of AKT signaling in murine T-cell lymphoma, **Nutr Cancer**, 69 (3),470-80. **IF= 2.900**
10. **Maurya AK** and Vinayak M (2017) PI-103 attenuates PI3K-AKT signaling and induces apoptosis in murine T-cell lymphoma, **Leuk & Lymphoma**. 58(5):1153-1161. **IF= 3.280**
11. Yadav MK, **Maurya AK**, Rajput G, Manar KK, Vinayak M, Drew MGB and Singh N (2017) New planar trans-copper (II) β-dithioester chelate complexes: Synthesis, characterization, anticancer activity and DNA-binding/cleavage studies, **Journal of Coordination Chemistry**, 70, 4, 1-20. **IF= 1.751**
12. **Maurya AK** and Vinayak M (2016) Breast cancer stem cell mediated aberrant signaling and epithelial-mesenchymal transition targets: hope for breast cancer therapy, **Intl J Cancer Oncol**, 3 (3), 1-7
13. **Maurya AK** and Vinayak M (2016) PI-103 and quercetin attenuate PI3K-AKT signaling pathway in T- cell lymphoma exposed to hydrogen peroxide, **PLoS One**, 11(8), e0160686. **IF= 3.752**
14. Pandey SK, Patel DK, **Maurya AK**, Thakur R, Mishra DP, Vinayak M, Haldar C and Maiti P (2016) Controlled release of drug and better bioavailability using poly (lactic-co-glycolic acid) nanoparticles, **Int J Biol Macromolec**, 89, 99-110. **IF=8.025**

15. **Maurya AK** and Vinayak M (2015) Modulation of PKC signaling and induction of apoptosis through Suppression of Reactive Oxygen Species and Tumor Necrosis Factor Receptor 1 (TNFR1): key role of quercetin in cancer prevention, **Tumor Biol**, 36, 8913-24. **IF= 3.650**
16. **Maurya AK** and Vinayak M (2015) Quercetin regresses Dalton's lymphoma growth via suppression of PI3K/AKT signaling leading to up regulation of p53 and decrease in energy metabolism, **Nutr Cancer**, 67 (2), 354-63. **IF= 2.900**
17. **Maurya AK** and Vinayak M (2015) Anticarcinogenic action of quercetin by downregulation of Phosphatidylinositol 3-kinase (PI3K) and protein kinase C (PKC) via induction of p53 in hepatocellular carcinoma (HepG2) cell line, **Mol Biol Rep**, 42 (9), 1419-29. **IF= 2.316**

Honors/Awards and Fellowships

- Visiting fellow Award from National Institute of Health (NIH), Bethesda, MD, USA (2019)
- Selected for National Post-Doctoral Fellow (NPDF) award from Science and Engineering Research Board, Department of Science and Technology (DST) (2016)
- Best poster Award in RHCPT-2016, JNU, New Delhi, India (2016)
- Travel Award from Department of Biotechnology for AACR, Philadelphia, PA, USA (2014)
- Travel Award from Department of Biotechnology for Biochemical Society, Cambridge, UK. (2014)
- Best poster Award in ICSCC-2013, Mumbai, India (2013)
- Qualified CSIR-NET-JRF from Council of Scientific and Industrial Research (CSIR) (2009)
- Qualified Graduate Aptitude Test in Engineering (GATE) (2009)

Invited lecture

- Maurya AK, Cancer Chemoprevention: from Diet to Gut, invited lecture at National Symposium on Recent trends in cancer research and its management (NSRTCRM-2022), Bihar, 11-12 May, 2022

Abstract published

1. Sandeep Paudel, Akhilendra Maurya, Komal Raina, Rama Kant, Cindy Tilley, Vasundhara Tiku, Bupinder Raina, Rajesh Agarwal. Delineating the protective role of Silibinin against Basal cell Carcinoma growth and progression. "SSPPS Research Retreat", Beaver Run Breckenridge Colorado, USA, Aug 08-9, 2019
2. Akhilendra K. Maurya, Dominique Reed, Dileep Kumar, Rama Kant, Bupinder Raina, Sushil Kumar, Komal Raina, Michael F Wempe, Nichole Reisdorph, Daniel N. Frank, Laura Saba, Michael G. Edwards, Chapla Agarwal, Rajesh Agarwal. Efficacy of Bitter

Melon Juice in High Fat Diet induced Obese (DIO) and KK-A^y Obese/Type II Diabetic Mice, "SSPPS Research Retreat", Beaver Run Breckenridge Colorado, USA, Aug 09-10, 2018

3. Akhilendra K Maurya, Sushil Kumar, Rama Kant, Dileep Kumar, Bupinder Raina, Anita Yadav, Elizabeth P. Ryan, Komal Raina. Protective efficacy of gut microbiome and microbial metabolites after rice bran consumption against colon tumorigenesis, AACR Annual Meeting 2018, Chicago, Illinois, USA, Apr 14-18, 2018.
4. Akhilendra Maurya, Rama Kant, Dileep Kumar, Bupinder Raina, Rajesh Agarwal, Elizabeth P Ryan, Komal Raina, Native Gut Microbial Metabolism of Rice Bran and Colorectal Cancer Prevention, "SSPPS Research Retreat", Beaver Run Breckenridge Colorado, USA, Aug 07-08, 2017
5. Akhilendra Kumar Maurya and Manjula Vinayak, Role of quercetin in regression of T-cell lymphoma via modulation of PI3K-AKT signaling "International Symposium on Role of Herbals in Cancer Prevention and Treatment" JNU, New Delhi, India Feb 9-10, 2016
6. Akhilendra Kumar Maurya and Manjula Vinayak, Efficacy of quercetin to regress the growth and survival of murine T-cell lymphoma, "International Conference on Recent Advances in Research and Treatment of Human Diseases, 4^{th} Annual Conference of Indian Academy of Biomedical Sciences" CSIR-IICT, Hyderabad, India Jan 9-11, 2015
7. Akhilendra Kumar Maurya and Manjula Vinayak, Decline in the growth of murine T-cell lymphoma via modulation of PI3K signaling pathway: key role of quercetin and PI-103, An AACR Special Conference "Targeting the PI3K-mTOR Network in Cancer" Philadelphia, PA, USA, Sept. 14-17, 2014
8. Akhilendra Kumar Maurya and Manjula Vinayak (2014) Quercetin Regresses carcinogenesis in murine T-cell lymphoma via modulating PI3K/AKT/PKC signaling pathway, A Biochemical Society Focused Meeting on "Signalling and Acquired Resistance to Targeted Cancer Therapeutics", Cambridge, UK, Jan. 5–7 2014
9. Manjula Vinayak, Akhilendra Kumar Maurya, Sudha Mishra, Renu Sharma and Laxmidhar Das, Signaling pathway involved in cancer prevention via antioxidants, International Conference on "Recent Advances in Cancer Prevention and Therapeutics", Gujarat, Nov. 19-20, 2013
10. Akhilendra Kumar Maurya and Manjula Vinayak, Modulation of PI3K signaling by quercetin downregulates AKT1 and regresses carcinogenesis via attenuating P110α confirmed by PI-103, 4th International Conference on "Stem Cells and Cancer (ICSCC-2013): Proliferation, Differentiation, and Apoptosis", Mumbai, Oct. 19-22, 2013
11. Akhilendra Kumar Maurya and Manjula Vinayak, Anticarcinogenic action of quercetin on human Hepatocellular carcinoma cells (HepG2) by down-regulation of PKC, National Conference on "Emerging Trends and Challenges in Basic and Translational Research in Biochemistry", BHU, Varanasi, Feb. 4-5, 2013

12. Akhilendra Kumar Maurya and Manjula Vinayak, Down regulation of PI3K signaling pathways by quercetin via regression of PKC in HepG2 cell line, SFRR-2013, International Conference on "Advances in free radicals, Redox Signaling and Translational Antioxidant Research & XII Annual Meeting of SFRR-India, CSIR-IITR, Lucknow, Jan. 30- Feb. 1, 2013

Membership/ Society

- American Association for Cancer research, USA

Workshop/training/seminar attended

1. Training on "RNA-Seq analysis using CCBR -Palantir workflow", NCI-NIH, Bethesda, MD, USA, Oct 3-4, 2019
2. Workshop on "Bioinformatics Training and Education Program (BTEP)" NCI-NIH, Bethesda, MD, USA, July 24, 2019.
3. Workshop on "Animal Imaging Science: Nuts and Bolts", University of Colorado Denver, USA, Sept 2017 to March 2018
4. Workshop on "Discovering Statistics by MS-Excel & SPSS" Banaras Hindu University, Varanasi, June 1-10, 2016
5. Workshop on "Application of Statistical Tools & Software's", Banaras Hindu University, Varanasi, May 2-22, 2016
6. Short term Training Programme on "Protein sequencing Analysis and Structure Prediction", University of Lucknow, Lucknow June 10-11, 2011
7. Workshop on "Radiation Safety in Teaching and Research", BHU, Varanasi, Jan. 12, 2011

[Dr Akhilendra Kumar Maurya]