

Curriculum-Vitae

Dr. Adarsh Kumar Shukla

Village & Post: Kaundhiyara, Tahsil: Karchhana, District: Prayagraj

Pin Code: 212106, State: Uttar Pradesh, Country: India

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✉ **adarshshukla349@gmail.com, adarsh201616@cuh.ac.in**



CAREER OBJECTIVE: -

To be associated with an organization that progresses dynamically, to update my knowledge and enhance my skills in the fields of Computer Aided Drug Design (CADD), Structural Bioinformatics, Clinical Bioinformatics, NGS data analysis, Pharmacology, Pharmacognosy, Biophysics, Metabolomics and Nutrigenomics to be a part of a team that works towards the growth of research and development.

EDUCATIONAL QUALIFICATION DETAILS: -

- Ph. D. from the Department of Nutrition Biology, Central University of Haryana (**Nov 2020 to Mar 2024**).
- MSc. in Bioinformatics from the University of Allahabad (**Aug 2015 to Aug 2017**).
- BSc. (Hons) in Biotechnology from S.H.U.A.T.S Prayagraj (**July 2009 to Sep 2013**).
- Intermediate from M.L.N.I.C. Kaundhiyara, Prayagraj (**July 2006 to May 2008**).
- High School from M.L.N.I.C. Kaundhiyara, Prayagraj (**July 2005 to May 2006**).

PROJECTS: -

- Worked as a Junior Research Fellow under the SERB project “**Identification of quadruplex (G4 DNA) and its target in *H pylori***” in the Department of Microbiology, Central University of Haryana, (**Nov 2017- May 2018**).
- Post-graduation project “**Structural comparison of target proteins of Protozoans in malaria disease**” based on three-dimensional protein structure modeling, analysis, comparison, and finding lead against their structures in Centre of Bioinformatics, University of Allahabad (**Aug 2015- Apr 2017**).
- 6-month undergraduate project on “**Antibacterial and antifungal activity of methanol and acetic extracts of *Azadirachta indica*, *Saraca asoka* and *Curcuma longa***” Department of Molecular and Cellular Engineering, JSBB, SHUATS, Prayagraj, (**Jan 2013 – May 2013**).
- One month of summer training project on “**Techniques involved in the screening of drugs and molecular biology**” at Pinnacle Biomedical Research Institute (PBRI), Bhopal, Madhya Pradesh, India.

- 30 days of summer training project on “**Adulteration testing, removing, processing and making the milk products**” in PARAG governments milk processing unit limited, Allahabad, Uttar Pradesh.

TEACHING EXPERIENCE: -

- Worked as a guest faculty for **Elementary Mathematics and Biostatistics** at B.R.I.A.T.S Prayagraj (**July 2018 to October 2020**).
- Worked as a PGT Biology and Physics in A.K.I.C Prayagraj (**August 2013-December 2015**).

PUBLICATIONS: -

1. Arzoo, Neeru, **Shukla, A.K.**, Panwar, S. & Kumar, A. (2024). **Effect of processing techniques on functional, antioxidants, and structural properties of finger millet (*Eleusine coracana*) flour.** Food and Humanity 100305 (In Press).
2. Panwar, S., Pal, S., **Shukla, A.K.**, Kumar, A., & Sharma, P.K. (2024). **Identification of micronutrient deficiency related miRNA and their targets in *Triticum aestivum* using bioinformatics approach.** Ecological Genetics and Genomics, 31, 2024, 100236.
3. Jain, S., **Shukla, A.K.**, Panwar, S., Kumar, R., & Kumar (2024). **In vitro antibacterial activity of antibiotics and plant essential oils against *Escherichia coli* MTCC443 supported through the molecular docking and pharmacokinetics study.** Biotechnol Appl Biochem. 2024;1–13. **Equal contribution**
4. **Shukla, A. K.**, Kumar, A. (2023). **Virtual Screening of Orally Active Lead Compounds of Pearl Millet and Their Structural Activity Against Target Protein of COVID-19.** Russian Journal of Bioorganic Chemistry, 2023, Vol. 49, Suppl. 1, pp. S53–S70.
5. **Shukla, A. K.**, & Kumar, A. (2023). **Comparative study between antiviral drugs and natural compounds against “Cryo-EM structure of the SARS-CoV-2 Omicron spike”.** Vegetos, 1-10.
6. Yadav, P., **Shukla, A. K.**, Kumari, A., Dhewa, T., & Kumar, A. (2024). **Nutritional evaluation of probiotics enriched rabadi beverage (PERB) and molecular mapping of digestive enzyme with dietary fibre for exploring the therapeutic potential.** Food and Humanity, 100221.
7. Bogra P, **Shukla, A. K.** et al. (2023). **Inhibition profiling of bestatin against the aminopeptidase B: in silico and in vitro approach.** Applied Biochemistry and Microbiology, 2024, Vol. 60, No. 1, pp. 124–131. **Equal contribution**
8. Deepika, **Shukla, A. K.**, Kumari, A., & Kumar, A. (2023). **Gut brain regulation using psychobiotics for improved neuropsychological illness.** Developmental Psychobiology, 65(5), e22404. **Equal contribution**
9. Pandit, A., **Shukla, A.K.**, Deepika et al. (2023). **In vitro Assessment of Anti-Microbial Activity of Aloe vera (*Barbadensis miller*) Supported through Computational**

10. Banyal, S., Vishal, Shukla, A.K. et al. (2023). **Effect of Modification on Quality Parameters of Jackfruit (*Artocarpus heterophyllus*) Seed Starch to Valorize its Food Potential and In-Silico Investigation of the Pharmacological Compound Against Salmonellosis.** Waste Biomass Valor, 14, 1597–1610. <https://doi.org/10.1007/s12649-022-01945-0>
11. Yadav, P., Shukla, A. K., Dhewa, T., & Kumar, A. (2021). **In silico investigation of antioxidant interaction and effect of probiotic fermentation on antioxidant profiling of pearl millet-based rabadi beverage.** Journal of Applied and Natural Science, 13(4), 1531-1544.

PUBLISHED ABSTRACT: -

1. Adarsh Kumar Shukla, Ashwani Kumar. **Recent trends for virtual screening of orally active lead candidates from Natural Products (NPs). International conference on applications of natural products nanomaterials and nano-pharmaceuticals (ICAN3)** (Hybrid mode) held on August 09.08.2023 and 10.08.2023 at School of Life Sciences, B. S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur, Chennai-600 048.
2. Adarsh Kumar Shukla, Ashwani Kumar. **Comparative study between antiviral drug and natural compounds against “Cryo-EM structure of the SARS-CoV-2 Omicron spike** in National Conference on Bioprospecting and Biotechnology (HAPTEN2022), Arunai Engineering College, Tiruvannamalai, Tamilnadu, India (2023).
3. Adarsh Kumar Shukla, Prakash Yadav, Ashwani Kumar. **In-silico screening and network profiling of orally active lead compounds of pearl millet against RNA-dependent RNA polymerase (receptor of COVID-19)** in the conference of Association of Microbiology India (2022).
4. Prakash Yadav, Adarsh Kumar Shukla, Tejpal Dheva, Gujan Goel and Ashwani Kumar **Effect of probiotics fermentation on antioxidant profiling of pearl millet-based rabadi** in Department of Dairy Microbiology, College of Dairy Science & Technology, GADVASU (2021).

PATENT: -

- One Indian patent entitles as “**CRAB-APPLE BASED JELLY SHEETS AND METHOD FOR PRODUCING THEREOF**” is granted on 15/02/2024 (application no: 202211020966), date of filing 07/04/2022.

SEMINARS AND WORKSHOPS: -

1. “**International Conference on Applications of Natural Products Nanomaterials and Nano-pharmaceuticals (ICAN3)**”, School of Life Sciences, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, India In association with Nano and Biomaterials Association (NBA), The Biotech Research Society (BRSI), India and

Centre for Surface Technology and Applications (CeSTA), Korea Aerospace University, Republic of Korea held on August 9 & 10, 2023.

2. National Conference on **Bioprospecting and Biotechnology** (HAPTEN2022), Arunai Engineering College, Tiruvannamalai, Tamilnadu, India (2023).
3. 6th Biennial PAi Conference and International Symposium on “ **Psychobiotics and Gut: Potential in Neurological Disorders**” organized by the Probiotics Association of India in association with ICAR-NDRI Karnal and DUVASU Mathura on December 05 & 06 2022.
4. Workshop in Department of Dairy Microbiology, College of Dairy Science & Technology, GADVASU (2021).
5. Five Days **National Workshop** on “**Revisiting Artisanal Foods for Bio-prospecting Probiotics: Basic to Applied Aspects**” (March 2022).
6. “**WORKSHOP FOR CAPACITY BUILDING OF YOUNG RESEARCHERS FOR CARRYING OUT NUTRITION RESEARCH**” 9th & 10th JUNE, 2022 Organized by Centre for Nutrition Research & Training, Division of Reproductive Biology, Maternal & Child Health, and Nutrition, Indian Council of Medical Research, New Delhi at Department of Nutrition Biology School of Interdisciplinary and Applied Sciences, Central University of Haryana.
7. 23rd World Environment Day webinar on “**Ecosystem and Restoration**” organized by Engineering and Technology and Department of Environmental Studies, in association with youth Read Cross Society, National Service Scheme, and Indian Water Resource Society (IIT Roorkee), on June 05, 2021.
8. National symposium on “**Food Security in Changing Climate**”, 20-21 Feb 2010.
9. **12th Indian Agricultural Scientist & Farmers Congress**, in BRIATS, Prayagraj, 20-21 Feb 2010.
10. **14th Indian Agricultural Scientist & Farmers Congress**, in BRIATS, Prayagraj, 18-19 Feb, 2012.

AREA OF INTEREST: -

Structural and sequence analysis, CADD, Pharmacology, Pharmacognosy, Pharmacology, Molecular docking, Molecular dynamics simulation, NGS data and clinical bioinformatics, Research related to medical informatics, Food product development and Nutrigenomics.

INSTRUMENTATIONAL EXPERIENCE: -

Autoclave, Centrifuge, Laminar air flow, Spectrophotometer, Chromatography, Gel electrophoresis, PCR, Fermenter, HPLC, LCMS etc.

IN-SILICO WORKING EXPERIENCE: -

Sequence analysis, Data mining and warehousing, Blast and phylogeny, Structural alignment, Protein structural modeling and analysis, Molecular docking, Molecular dynamics Simulation, CADD related tools, Network analysis, Computational pharmacology, and Machine learning based target identification.

PROGRAMMING SKILLS: -

Familiar with the “BIOPERL” and “Python” programming languages for handling biological problems and experienced in MATLAB working platform.

POTENTIAL REFEREES: -

- ✓ Dr. Ashwani Kumar, Assistant Professor in the Department of Nutrition Biology, Central University of Haryana, Mahendergarh. Email: ashwanindri@gmail.com, Mo: 9813968380.
 - ✓ Dr. Pramod Katara, Assistant Professor in the Centre of Bioinformatics, University of Allahabad, Prayagraj. Email: pmkatara@gmail.com, Mob. 7309465425.
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PERSONAL PROFILE: -

Name: -Adarsh Kumar Shukla

Date of Birth: -20 Dec 1991

Father Name: Late Suraj Chadra Shukla

Mother Name: Gayatri Shukla

Sex: - Male

Marital Status: - Married

Nationality: - Indian

Languages known: -Hindi and English

Personal Qualities: -Cooperative, Good Communication Skills and good team worker.

Hobby: - Teaching, Plantation, Music & Cricket.

Deceleration: -

I hereby declare that the above information is completely true to the best of my knowledge. Any discrepancy in this regard will render me disqualified for employment.

Place: Prayag Raj

ADARSH KUMAR SHUKLA

Date: - 25 April 2024