




**INSTITUTE OF HOME ECONOMICS**  
**UNIVERSITY OF DELHI**



Name	Dr. Meenakshi Vachher		Photograph
Designation	Assistant Professor		
E-mail	<a href="mailto:meenakshi.vachher@ihe.du.ac.in">meenakshi.vachher@ihe.du.ac.in</a>		
Educational Qualifications: M.Biotechnology, PhD Biochemistry from AIIMS, New Delhi			
Teaching experience: 12 years			
Subjects/Papers Taught: Molecular biology, Recombinant DNA Technology, Genetic engineering and Biotechnology, Bioinformatics, Enzymes, Proteins, Intermediary Metabolism, Hormone Biochemistry, Membrane biochemistry and Bioenergetics, Nutritional Biochemistry			
Awards received <b>CSIR-NET</b> qualified <b>ICMR-JRF</b> qualified <b>Special Appreciation Award for the Best Poster Presentation</b> during the 24th Annual Convention of Indian association for Cancer Research and International Symposium on Human Papillomavirus and cervical Cancer, February, 2005.			
Research Interest/Specialization: Cancer Biology, Adipokines, Enzymes, Biopharmaceuticals			
ORCID No. 0000-0003-4039-1985			
Research Projects			
Title	Funding agency/organization	Duration of Project	

Research papers since 2010 (APA format)

1. **Vachher, M.,\*** Yadav, S.,\* Gopal, P., Chopra, S., Grover, N., Vanshika, Sharma, S., Burman, A., Trilok-Kumar, G. (2021). A Sustainable Option of Developing Kitchen Gardens Based on Air Pollution Tolerance Index (APTI) Method of Plants with Edible Leaves for Health and Well Being. *The Indian Journal of Nutrition and Dietetics*, 58; 54-67. DOI: 10.21048/IJND.2021.58.1.26122, ISSN 0022-3174
2. **Vachher, M.,** Sen, A., Kapila, R., Nigam, A. (2021) Microbial therapeutic enzymes: A promising area of biopharmaceuticals. *Current Research in Biotechnology (Elsevier)* Volume 3, 195-208. ISSN 2590-2628, <https://doi.org/10.1016/j.crbiot.2021.05.006>.
3. **Vachher, M.,** Sen, A., Burman, A., R., Nigam, A. (2021) Bacterial enzymes as diagnostic tools for various human pathogens. *Journal of Scientific Research, BHU.* Volume 65, Issue 5, pages 105-115. ISSN: 0447-9483.
4. **Vachher M,** Arora K, Burman A, Kumar B. (2020). NAMPT, GRN and SERPINE1 signature as predictor of disease progression and survival in gliomas. *Journal of Cellular Biochemistry*, 121(4) 3010-3023. ;ISSN 1097-4644 (Online IF-4.4)
5. Kumari, T., **Vachher, M.,** Bansal, S., Bamezai, RNK and Kumar, B. (2018) Meta-analysis of mitochondrial T16189C polymorphism for cancer and Type 2 diabetes risk. *Clinica Chimica Acta* Volume 482, Pages 136-143, ISSN 0009-8981 (Print IF-2.9)
6. **Sawhney M,** Kaur J, DattaGupta S, Shukla NK, Srivastava A, Walfish PG, Ralhan R. (2013) Clinical significance of altered expression of  $\beta$ -catenin and E-cadherin in oral dysplasia and cancer: potential link with ALCAM expression. *PLoS One* 8(6):e67361. doi: 10.1371/journal.pone.0067361.eISSN: 1932-6203 (IF: 3.73)
7. **Sawhney M,** Kaur J, Dattagupta S, Shukla NK, Srivastava A, Ralhan R. (2010) Clinical significance of Phosphatidyl Inositol Synthase overexpression in oral cancer. *BMC Cancer*. 2010 Apr 28; 10: 168. doi: 10.1186/1471-2407-10-168. ISSN: 1471-2407 (IF: 3.33)

#### Book chapters published/edited

1. Enzymes
2. Proteins
3. Role of plant biotechnology in environment
4. Role of plant biotechnology in industry

Published online in the Virtual learning environment (VLE) for Institute of Lifelong learning (ILLL), University of Delhi (ill.du.ac.in). (ISSN 2349-154X)

Any other

#### Oral Presentations

- An invited speaker and Resource person in PETA INDIA sponsored one day workshop on “Replacing Regulatory Experiments on Animals: An Introduction to in silico Models and in vitro test methods” on the topic “Genotoxicity and carcinogenicity” at SVKM’s Dr. Bhanuben Nanavati College of Pharmacy, Mumbai on 3rd November, 2018.
- “Pollution resistance assessment of few edible plants based on Air pollution tolerance index (APTI) method”. Oral presentation at the National Conference on “Emerging Environmental Challenges and Sustainable Development”, March 21-23, 2018.

#### Poster Presentations

- E-poster entitled “In-vitro effects of smokeless tobacco Extract on cell proliferation and cyclin D1 Expression in oral cell systems” during virtual International 9th Annual American Society for Cellular and Computational Toxicology (ASCCT) Meeting held on October 20-23rd October, 2020

- Best Poster Award : Air Pollution Tolerance Index of few edible plants Shruti Chopra, Sapna Sharma, Nikita Grover, Geeta Trilok Kumar, Sandeep Yadav, Meenakshi Vachher in National Conference On “Clean & Green Energy: The Chemical and Environmental Aspects” February 16-17, 2017 organized by Department Of Chemistry, Bhaskarcharya College Of Applied Sciences (University of Delhi).
- Biochemical estimation of Chlorophyll as a remedy for pollution Prerna Gopal, Vanshika, Geeta Trilok Kumar, Sandeep Yadav, Meenakshi Vachher in National Conference On “Clean & Green Energy: The Chemical and Environmental Aspects” February 16-17, 2017 organized by Department Of Chemistry, Bhaskarcharya College Of Applied Sciences (University of Delhi).
- Assessment of Air Pollution Tolerance Index (APTI) of four common plants species collected from Delhi region Chiranjeev Kaur Gill, Disha Kapila, Reshu Thakur, Surbhi Bhati, Geeta Trilok Kumar, Sandeep Yadav, Meenakshi Vachher in National Conference On “Clean & Green Energy: The Chemical and Environmental Aspects” February 16-17, 2017 organized by Department Of Chemistry, Bhaskarcharya College Of Applied Sciences (University of Delhi).
- Altered expression of cell adhesion molecule in oral carcinogenesis. Meenakshi Sawhney, Ajay Matta, Nidhi Rohatgi, Jatinder Kaur, Siddhartha Datta Gupta, Nootan K. Shukla, Suryanarayana V.S.Deo and Ranju Ralhan. Poster presented at Indian Association of Cancer Research-2007.
- Smokeless tobacco extract modulates the expression of Nuclear Factor kappa B and Cyclooxygenase-2. Meenakshi Sawhney, Nidhi Rohatgi, Jatinder Kaur, Siddhartha Datta Gupta, Nootan K. Shukla, Suryanarayana V. S.Deo and Ranju Ralhan. Poster presented at International Symposium on Translational Research: Apoptosis and Cancer-2005.

#### **Symposiums, Workshops and Conferences organized/participated**

- Completed an online Short term course for teachers on “Graphic Design” organised by St Mary’s College (Autonomous) with the Department of Biotechnology, Government of India from 31st May-5th June, 2021.
- Participated in the four days Online Hands-on Workshop organized by Deshbandhu College under the aegis of IQAC and DBT Star College Scheme, on “Research Methodology” from April 1- 5, 2021.
- Organised and participated as a resource person in one day outreach Program on “Introduction to Biosciences” on 17th January’ 2021.
- Organized a National webinar on “Scientific manuscript writing” on 5th March 2021.
- Organised a two days International webinar on “Bioinformatics (concepts and applications)” from 18 to 19 September 2020.
- Attended “Summer school in innovative approaches in Science”, June 22-26, 2020 held virtually by John Hopkins Centre for Alternatives to animal testing and Physicians committee for responsible medicine.
- Participated and organised a five day online national hands-on workshop on “Moodle: An Online Learning Management System” from July 01-05, 2020 organized by Department of Biochemistry, Institute of Home Economics, University of Delhi.
- Organised and participated as a resource person in one day technical workshop on “PCR and ELISA: Techniques in molecular Biology and Immunology” on 7th February’ 2019.
- Organized and participated as resource person in 4th technical two day national workshop on “Introduction to Clinical Biochemistry” on 24th-25th January’ 2019.
- Organized and participated as resource person in 3rd technical two day national workshop “Introduction to Clinical Biochemistry” on 27th-28th August 2018.
- Organized and participated as resource person in a two day symposium “Replacing Regulatory experiments on animals: Introduction to In Silico Models and In Vitro Test Methods” on 26-27 October 2017.

- Organized and participated as resource person in a two day national workshop “Introduction to Clinical Biochemistry” on 12-13 September 2017.
- Organized and participated as resource person in a technical workshop “PCR & ELISA” held at Department of Biochemistry, Institute of Home Economics, University of Delhi, New Delhi on 7th April 2017.
- Organized and participated as speaker in a national workshop “Introduction to Clinical Biochemistry” held at Department of Biochemistry, Institute of Home Economics, University of Delhi, New Delhi on 1-2 September 2016.
- Organized a national workshop “Protein Visualization and Autodocking” held at Department of Biochemistry, Institute of Home Economics, University of Delhi, New Delhi on 29th February 2016.
- Organized a national workshop cum plenary lecturer held at Department of Biochemistry, Institute of Home Economics, University of Delhi, New Delhi on 29th January 2016.
- In the organizing committee of International workshop on ‘Emerging role of vitamin D in human health’ held on 4-5 October, 2011 organised by Institute of Home Economics, University of Delhi
- Actively involved in organization of oration day lecture being presented by Dr Abdul Kalam Azad as a part of golden jubilee celebration of Institute of Home Economics, University of Delhi held on November 2, 2011.
- Participated in National workshop on RNAomics organised by Department of Biochemistry, Shivaji college, University of Delhi from October 25-29, 2010
- Participated in National conference on “Sustainable development- A collective vision” held on 31st Oct-1st Nov, 2011 organised by Institute of Home Economics, University of Delhi.