


Curriculum vitae

Name	Dr Savita Bansal	
Designation	Assistant Professor, Department Biochemistry	
Contact Details	Savita.bansal@ihe.du.ac.in , bansalsavita_1916@yahoo.com Mobile: 9013342053	
Educational Qualifications: <ul style="list-style-type: none">● MSc Biochemistry (2008), Department of Biochemistry, Jamia Millia Islamia University, New Delhi● Ph.D Medical Biochemistry (2015), Department of Biochemistry, University College of Medical Sciences, University Of Delhi		
Awards and Fellowships <ul style="list-style-type: none">● Awarded UGC Post Doctoral Fellowship for woman [Ref No.F15-1/2015-17/pdfwm-2015-17-DEL-38083 (SA-11), Year 2015-2016]● CSIR-JRF-NET Qualified (Ref No:20-6/2008(ii) EU-IV, Dec.2008)● Topper of BSc (2002-2005).		
Teaching experience: <ul style="list-style-type: none">● Present: Teaching as Assistant Professor in Department of Biochemistry at IHE, DU (Aug 2015 –till date).● Part of IGNOU Panel. Participated in taking theories, conducting practical for the MSc Nutritional Biochemistry course of IGNOU.		
Subject Expertise <p>Molecules of Life; Proteins; Gene Organisation, and Replication; Gene Expression and Regulation, Nutritional Biochemistry; Techniques in Biochemistry.</p>		
Practical Skills: <ul style="list-style-type: none">● Qualitative estimation of Carbohydrates, amino acids, proteins and Nucleic acid.● Quantitative estimation of proteins and nucleic acid.● Preparation of Buffers● Titration of Calcium and vitamin C● Separation of amino acid and Bases by TLC● SDS PAGE.● Absorption spectrum of proteins and nucleic acid● DNA isolation and agarose electrophoresis● Diauxic growth curve studies		

- PBMC isolation and cell viability

Subjects/Papers Taught

BSc (H) Biochemistry, Semester V –Gene Expression and Regulation
 BSc (H) Biochemistry, Semester V – Nutritional Biochemistry
 BSc (H) Biochemistry, Semester IV – Gene Organisation, and Replication
 BSc (H) Biochemistry, Semester I – Molecules of Life
 BSc (H) Biochemistry, Semester II – Proteins
 BSc (H) Food Technology, Semester I – Biomolecules
 BSc (H) Food Technology, Semester II – Techniques in Biochemistry
 BSc (H) Microbiology, Semester I – Biomolecules
 BSc (H) Microbiology, Semester III –Biochemical Application in Forensic Sciences

BSc (P) Home Science, Semester V – Nutritional Biochemistry
 BSc (H) Home Science, Semester V – Nutritional Biochemistry

Research Interest

Association of Advanced Glycation end products (AGEs) in development and progression of type 2 diabetes mellitus (T2DM), polymorphism of receptor for AGEs in occurrence of T2DM ; Endothelial cell dysfunction, paraoxonase activity, Inflammation, oxidative stress and cardiovascular complications.

Research Publication, and Chapters

- **ORCID No.:** <https://orcid.org/0000-0002-6873-5201>
- **Total Publications: 18**
- **Chapters in Books: 3**
- **Citations: 492**
- **h-Index: 10**
- **i10-Index: 10**
- **Total impact Factor: 62**
- **Oral and Poster presentation in International and National Conferences: 5**
- **FDP: 7**
- Content development for various chapters of **Textbook of Biochemistry with Clinical Correlations, 7e by Thomas M. Devlin (Indian Adaptation)** Published by Wiley India Pvt. Ltd.
- Content development for various chapters of the International Adaptation of “**Essential Biochemistry, 5th Edition by Charlotte W. Pratt, Kathleen Cornely**”.
- **Reviewer**
 - Frontiers Molecular Biosciences, Impact factor 6.1
 - International Journal of Diabetes in Developing Countries - Impact factor 2
 - [Oxidative Medicine and Cellular Longevity](#), Impact factor 7.3

Extra-curricular Activities and Administrative Skills

- Participated in NEP Syllabus drafting of BSc(H) Biochemistry Course.
- Involved in Paper setting and evaluation, Biochemistry Course.
- Participated as Organizer, and speakers in various activities such as Workshop, Webinar, Lecture series, and Seminar conducted by Department of Biochemistry.

Committee Work:

- **Student Amenities and Purchase committee:** Placed the order for various services such as service to sanitize the college during Covid pandemic, and also raised the BID for many products such as AC, etc. Take care of many activities associated with student amenities.
- **Admission committee:** Participated in admission process of Biochemistry Department
- **Automation committee:** college Website development, and editing of Faculty CV
- **Internal assessment committee:** Keep recording of entry and uploading of Marks at college and university portal
- **Sports committee:** Participated and organized various events conducted by Sports committee such as Republic day, Independence Day, Sports Day, Yoga Sessions, Badminton competition for teaching, non-teaching and students, Report making etc.
- **Orientation committee:** Participate in organization of orientation programs conducted by college from 2018-2021

Research papers

1. **Savita Bansal**, Archana Burman, Asok Kumar Tripathi. Advanced glycation end products: Key mediator and therapeutic target of Cardiovascular complications in diabetes. *World Journal of Diabetes*; 2023. August 15; 14(8): 1146-1329, ISSN 1948-9358 (online); DOI: 10.4239/wjd.v14.i8.1146. **IF- 4.5**
2. Meenakshi Vachher, **Savita Bansal**, Bhupender Kumar, Sandeep Yadav and Archana Burman. Deciphering the role of aberrant DNA methylation in NAFLD and NASH (8, e11119, **2022, Heliyon**, ISSN 2405-8440 Online, **IF- 3.77**
3. Meenakshi Vachher, **Savita Bansal**, Bhupender Kumar, Sandeep Yadav, Taruna Arora, Nalini Moza Wali and Archana Burman. Contribution of organokines in the development of NAFLD/NASH associated hepatocellular carcinoma. (Volume 123, pages 1-32, **July 2022 Journal of Cellular Biochemistry**) ISSN 1097-4644, <https://doi.org/10.1002/jcb.30252>, **IF- 4.48**.
4. **Savita Bansal**, Meenakshi Vachher, Archana Burman. Calreticulin: A quintessential multifaceted protein with therapeutic potential. *Journal of Proteins and Proteomics*; 2023; **14**:187–200 <https://doi.org/10.1007/s42485-023-00111-x>.
5. **Savita Bansal**, Meenakshi Vachher, Taruna Arora, Bhupender Kumar and Archana Burman. Visceral fat: A key mediator of NAFLD development and progression. *Human Nutrition & Metabolism*. 2023; Volume 33, 200210. <https://doi.org/10.1016/j.hnm.2023.200210>
6. Bhupender Kumar, **Savita Bansal**, Disha Kapila, Rishu Thakur, Surbhi Bhati, Nikita Grover, Geeta Trilok-Kumar and Archana Burman. Assessment of Type 2 Diabetes Risk in General Population using Bitter Taste Sensitivity Status to Phenylthiocarbamide- A Pilot Study. *The Indian Journal of Nutrition And Dietetics*. 2023; 60 (2), 201-213. DOI: <https://doi.org/10.21048/IJND.2023.60.2.31037>.
7. Zafar Iqbal Bhat*, Bhupender Kumar*, **Savita Bansal**, Afreen Naseem, Raj Ranjan Tiwari, G.D Sharma and M. Moshahid Alam Rizvi. Association of PARK2 promoter polymorphisms and methylation with colorectal cancer in North Indian population. (Volume 682, Pages 25–32, **January 2019, GENE**) ISSN **0378-1119 IF 3.91**

8. TarunaKumari, Meenakshi Vachher, **Savita Bansal**, Rameshwar NK Bamezai and Bhupender Kumar. Meta-analysis of mitochondrial T16189C polymorphism for cancer and Type 2 diabetes risk. (Volume 482, Pages 136-143, **July 2018, Clinica Chimica Acta**) ISSN 0009-8981 **Print IF-6.3**.
9. Bhupender Kumar*, Zafar Iqbal Bhat*, **Savita Bansal**, Sunil Saini, Afreen Naseem, Khushnumawahabi, Archana Burman, Geeta Trilok-Kumar, Sundeep Singh Saluja and M. MoshahidAlam Rizvi. Association of mitochondrial copy number variation and T16189C polymorphism with colorectal cancer in North Indian population. (Volume: 39 issue: 11, **November 2017, Tumor Biology**) ISSN: 1010-4283 (Print) **IF-3.65**
10. DiweshChawla, **SavitaBansal**, BasuDev Banerjee, Sri VenkataMadhu, Om PrakashKalra, Ashok Kumar Tripathi. Role of advanced glycation end product (AGE)-induced receptor (RAGE) expression in diabetic vascular complications. (Volume **95**, Pages **1–6**, **2014, Microvascular Research**). **ISSN: 00262862, IF-3.75**
11. Ashok K. Tripathi, DiweshChawla, **SavitaBansal**, Basu D. Banerjee, S. V. Madhu. Association of RAGE gene polymorphism with vascular complications in Indian type 2 diabetes mellitus patients. (Volume **103**, Pages **474-481**, **2014, Diabetes Research and Clinical Practice**). **ISSN: 0168-8227, IF-8.1**.
12. DiweshChawla, **SavitaBansal**, Pawan Kumar Kare, BasuDev Banerjee, Sri VenkataMadhu, Ashok Kumar Tripathi . RAGE gene polymorphism and expression: risk factor for vascular complications in type 2 diabetes mellitus. *Molecular Cytogenetics*. 2014; 7, 1-1
13. **SavitaBansal**, DiweshChawla, BasuDev Banerjee, Sri VenkataMadhu, Ashok Kumar Tripathi. Association of RAGE gene polymorphism with circulating AGEs level and paraoxonase activity in relation to macro-vascular complications in Indian type 2 diabetes mellitus patients. (**Volume 526**, **pages 325–330**, **2013, Gene**). **ISSN 0378-1119, IF-3.91**
14. **SavitaBansal**, DiweshChawla, ManushiSiddarth, Basu D. Banerjee, S. V. Madhu, Ashok K. Tripathi. A study on serum advanced glycation end products and its association with oxidative stress and paraoxonase activity in type 2 diabetic patients with vascular complications. (Volume **46**, **Pages 109-114**, **2013, Clinical Biochemistry**). **ISSN: 0009-9120, IF-3.62**
15. **SavitaBansal**, ManushiSiddarth, DiweshChawla, Basu D. Banerjee, S. V. Madhu, Ashok K. Tripathi. Advanced glycation end products enhance reactive oxygen and nitrogen species generation in neutrophils *in vitro*. (**Volume 361**, **Pages 289-296**, **2012, Mol Cell Biochem**) **ISSN: 0300-8177, IF-3.84**
16. ManushiSiddharth, Sudip K. Datta, **SavitaBansal**, Mohammad Mustafa, Basu D. Banerjee, Om P. Kalra, and Ashok K. Tripathi. Study on Organochlorine Pesticide Levels in Chronic Kidney Disease Patients: Association with Estimated Glomerular Filtration Rate and Oxidative Stress. (**Volume 26 (6)**, **Pages 241-247**, **2012, J Biochem Molecular Toxicology**). **ISSN:1099-0461. IF-3.56**

Book chapters published/edited

1. Content development for various chapters of **Textbook of Biochemistry with Clinical Correlations, 7e** by **Thomas M. Devlin (Indian Adaptation)** Published by Wiley India Pvt. Ltd.
2. **Savita Bansal**, Pawan K Kare, Ashok Kumar Tripathi, Sri VenkataMadhu. Advanced Glycation End Products: A potential Contributor of Oxidative Stress for Cardio-Vascular Problems in Diabetes. **Oxidative Stress in Heart Diseases. Springer Nature Publisher**, Editor: Prof. Sajal Chakraborti, Prof. Naranjan S Dhalla, Chapter 20. Page: 437-460. **2019, ISBN 978-981-13-8273-4**.

3. Pawan K. Kare, Rishila Ghosh, **Savita Bansal**, Basu Dev Banerjee, Om Prakash Kalra and Ashok K. Tripathi. Advanced glycation end products-Mediated Consequences in Diabetic Nephropathy. **Advances in Medicine and Biology (NOVA Publisher)**, volume 135, page 207-221, 2018. ISBN: 978-1-53614-421-5.
4. **Savita Bansal**, Pawan K. Kare, Ashok K. Tripathi, S. V. Madhu. Advanced glycation end products: formation, metabolism and role in diabetic vascular complication. **Advances in Medicine and Biology (NOVA Publisher)**, volume 119, page 81-110, 2017. ISBN: 978-1-53611-326-6.

Association with Professional Societies

- Indian Society of Immunology (Life Member)

Technical Skills:

- Data Analysis and statistical evaluation of data using statistical softwares such as SPSS.

Short course/FDP/Workshop

- Participated in the 4-Week Faculty Induction/Orientation Programme organized by Teaching Learning Centre Ramanujan College, University of Delhi under the aegis of MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING, 22nd November – 2023-21st December, 2023
- Participated in One week FDP on “FORENSIC SCIENCE” organized by UGC-Malaviya Mission Teacher Training Centre (UGC-MMTTC/GAD-MMTTC), SGTB Khalsa College, University of Delhi in collaboration with University of Delhi (Department of Anthropology and Skills Enhancement Committee); Acharya Narendra Dev College, DU (Department of Biomedical Science) and Forensic Science Unit, SGTB Khalsa College, University of Delhi, 06th April 2024-18th April 2024.
- Participated in One week FDP on “NEP Orientation & Sensitization Programme” organized by UGC-Malaviya Mission Teacher Training Centre (UGC-MMTTC/GAD-MMTTC), SGTB Khalsa College, University of Delhi, 04th March 2024-14th March 2024
- Participated in workshop on “**Digital modules of Genes to Pathways**” second edition conducted between 2nd August to 17th August organized by decodelife.co.in
- Participated in the Faculty Development Program “**Aspects of Research Paper Writing**”, organized by the Khandelwal Vaish Girls Institute of Technology, Vaishali Nagar, Jaipur on 25-26 June, 2021.
- Participated in the Faculty Development Program “**Online teaching using Google classroom and Google meet**”, organized by the Website and Automation Committee & Department of Microbiology on 22nd August, 2020.
- Organized and attended five days online national Hands-on-National Workshop on “**MOODLE- An online learning management system**” organized by Department of Biochemistry 1-5th July, 2020.
- Completed 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.
- Completed two weeks online workshop on “**Tools and Techniques in Statistical Analysis**” organised by Acharya Narendra Dev College, University of Delhi, 06-19 April, 2021.
- Completed 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.
- Successfully completed teacher training course on “**Recombinant proteins: Expression, Purification, Characterization**” held on 2nd -16th July 2019 organized by Centre for Innovation in Infectious Disease Research, Education and Training (CIIDRET), University of Delhi South Campus in association with GE-Health Care.
- Participated in workshop on “**An Introduction to STATA for Medical Statistics**” held on 30th Nov-4th Dec, 2015, jointly organized by IHE, DU and London School of Hygiene and Tropical Medicine UK under the UK Indian Education and Research Initiative.
- Participated in workshop on “**Advanced Techniques in Genomics of Type-2 Diabetes**” held on 8th-12th February, 2011 Organized by Madras Diabetes Research Foundation (ICMR- Advanced Centre for Genomics of Type 2 Diabetes), in collaboration with University of Minnesota, U.S.A.

- Training course on “**Statistical Package for Social Sciences (SPSS)**”, 06/12/2010 to 10/12/2010 organized by Delhi University Computer Centre, University of Delhi.

Workshops and lectures at IHE as organizer/resource person

- Participated as speaker and Organizer for on “**Bioinformatics as a tool and career option for students of biology**” organised by department of Biochemistry, IHE College on **April 12, 2024**
- Participated as speaker and Organizer for talk on “**The role of indigenous technologies in the fight against COVID-19 pandemic**” organised by department of Biochemistry, IHE College on **March 11, 2024**
- Participated as speaker and Organizer in Online symposium on “**Pre-Diabetes**” under Vidya Vistar Scheme organised by department of Biochemistry, IHE College and ZIRTRI College on **February 9, 2024**
- Participated as speaker and Organizer in an outreach program on “**Basic understanding of Biosciences**” organised by department of Biochemistry and Anveshan, Biochemistry society of Institute of Home Economics on **January 20, 2021**.
- Participated as speaker and Organizer in the workshop on **primer designing and In-Silico PCR** on **15 March, 2020**, organized by department of Biochemistry and Anveshan, Biochemistry society of Institute of Home Economics
- Participated as Organizer in the **5 Days** workshop on **Online National Hands on Workshop on "MOODLE: An Online Learning Management System" from 01 to 05 July 2020**, organized by Department of Biochemistry, Institute of Home Economics, University of Delhi
- Participated as Organizer in the two days **international webinar on “Bioinformatics (concepts and applications)”** from **18 to 19 September 2020**, organized by Department of Biochemistry, Institute of Home Economics.
- Organized an outreach programme on “Unravelling the mystery of DNA” for Class XI & XII students at IHE on 19th August, 2019.
- Organized a lecture series on “Understanding lifestyle disorders: A biochemical perspective” at IHE on 12th January 2020.
- 2nd Workshop on “PCR & ELISA”, 7th Feb 2019
- 4th Workshop on “Introduction to Clinical Biochemistry”, 24 & 25th January 2019
- 3rd Workshop on “Introduction to Clinical Biochemistry”, 27 & 28th August 2018
- Participated as speaker and Organizer in seminar on “**Replacing Regulatory Experiments on Animals**” organized by PETA and Department of Biochemistry, Institute of Home Economics, University of Delhi, October 26-27, 2017.
- Participated as speaker and Organizer in the 2nd hands on workshop on “**Introduction to Clinical Biochemistry**” at Department of Biochemistry, Institute of Home Economics, University of Delhi, September 12th – 13th, 2017.
- 1st Workshop on “PCR & ELISA”, 7th April 2017
- Participated as speaker and Organizer in workshop on “**Introduction to Clinical Biochemistry**” at Department of Biochemistry, Institute of Home Economics, University of Delhi, September 1st – 2nd, 2016.
- Organized the Plenary Lecture on “**Nature of Biology Education, Research and Career**” by Prof. K. Muralidhar, JC Bose Fellow, Emeritus Professor South Asian University and Technical Workshop on “**Drug Designing and Autodocking**” at Department of Biochemistry, Institute of Home Economics, University of Delhi, 29th January, 2016.
- Organized the Lecture on “**Protein Structure and Sequence Databases**” and technical workshop on “**Autodocking**” at Department of Biochemistry, Institute of Home Economics, University of Delhi, 29th February, 2016.

Workshops/Conference/Training organised at UCMS (organizer/resource person)

- Organized the **30th Annual conference of Indian Immunology Society** at Department of Biochemistry, University College of Medical Sciences, University of Delhi, Delhi, November 15-17, 2013.
- Conducted the knowledge sharing sessions and Practical’s for international students enrolled in “**Indo-African exchange program**” at Department of Biochemistry, University College of Medical Sciences, University of Delhi.

Scientific Conferences: Abstract Presentation/attended:

Oral presentation:

- **Savita Bansal**, R Ghosh, D. Chawla, M. Siddarth, D. Malhotra, R. S Ahmed, B. D Banerjee, S V Madhu*, A. K Tripathi. Advanced glycation end products induce reactive species generation, DNA damage and apoptosis in peripheral blood mononuclear cells in vitro in proceedings of **41th Annual Conference of Research Society for the Study of Diabetes in India (RSSDI)**, November 8-13, 2013, Page no. 23-24, India Expo Centre, Greater Noida, India.

Poster presentation:

- **Savita Bansal**, Diwesh Chawla, Manushi Siddarth, Rafat S Ahmed, Basu D. Banerjee, S. V. Madhu, Ashok K. Tripathi. "Inflammatory Response in type 2 diabetes mellitus: Role of Advanced Glycation End Products" in proceedings of 39th Annual Conference of **Indian Immunology Society**, November 15-17, 2013.
- **Savita Bansal**, Manushi Siddarth, Diwesh Chawla, Dipti Malhotra, Rafat S Ahmed, Basu D Banerjee, S V Madhu*, Ashok K Tripathi. "Association of RAGE gene Polymorphisms with circulating AGEs level and Paraoxonase activity in relation to development of macro-vascular complications in type 2 diabetes mellitus patients" in proceedings of **International Symposium on developmental & complex disorders & 38th Annual Conference of the Indian Society of Human Genetics: Genomics and Community Health**, December 9-11, 2012, Page no. 137, BHU, Varanasi, India.
- **Savita Bansal**, Manushi Siddarth, Diwesh Chawla, Dipti Malhotra, Rafat S Ahmed, Basu D Banerjee, S V Madhu*, Ashok K Tripathi. "Advanced Glycation End Products-A Potential Contributor of Oxidative Stress by Priming Neutrophils in Diabetes" in proceedings of **11th Annual Conference of Society for Free Radical Research-India and International Conference on "Emerging Trends in Free Radicals, Antioxidants and nutraceuticals on Health, Disease and Radiation Biology"**, Jan 12-14, 2012, Kolkata, India.

Conference Attended

- Participated in **8th Annual Conference of Research Society for the Diabetes in India (RSSDI)** on September 23, 2012, Le Meridien, New Delhi.
- Participated in **International Conference of Society of Free Radicals Research 2008** at AIIMS, New Delhi.
- Participated in **Interdisciplinary Science Conference on Recent Trends in Research in Biological Sciences, 2007** at Jamia Millia Islamia University, New Delhi.