



# Shivaji College Faculty Details Proforma

Title	Dr.	First Name	Usha	Last Name	Yadav	Photograph
Designation		Assistant Professor				
Address		Gurugram, Haryana				
Office Phone No.						
Mobile						
Email						
Web-Page Educational Qualifications		B.Sc., M.Sc.,	Ph.D.			
Degree			Universit	y/Institute		Year
Ph.D.		National Insitute of Immunology			2019	
M.Phil	./M.Tech.					
PG		University of Delhi, South Campus				2012
UG		Shivaji College, University of Delhi			2010	
Any Other Qualification						
Caree	r Profile					

Assistant Professor in the Department of Biochemistry, Shivaji College, University of Delhi (July, 2018 - till date).

# **Administrative Assignments**

Member of Shivaji College NAAC team 2020

Member of Women Development Cell 2019-2022

Member of Alumni committee 2019

Member of Annual day report committee 2018-2019 and 2019-2020.

Member of Annual day report and event committee 2020-2021.

# **Areas of Interest/Specialisation**

Proteins, Enzymes, Molecular Biology, Genetic Engineering and Biotechnolgy, Protein-protein interactions

# **Subjects Taught**

Cell Biology; Basic Microbiology; Tools and Techniques in Biochemistry; Enzymes; Gene Organization, Replication and Repair; Nutritional Biochemistry; Metabolism of Carbohydrates and Lipids; Metabolismm of Amino Acids and Nucleotides; Molecular Biology of Infectious Diseases and Protein Purification Techniques.

# Innovation Project/Research Projects (Major Grants/Research Collaboration)

# Publications Profile (Research Papers/Books)

- 1. **Yadav U**, Arya R, Kundu S and Sundd M. (2018) The 'recognition helix' of the type II Acyl Carrier Protein (ACP) utilizes a 'ubiquitin interacting motif (UIM)' like surface to bind its partners. Biochemistry (10.1021/acs.biochem.8b00220).
- 2. **Yadav U** and Sundd M. (2018) Backbone chemical shift assignments of the glycine cleavage complex H protein of *Escherichia coli*. Biomolecular NMR Assignments 12(1):163-165.
- 3. Kumar A, Arya R, Makwana PK, Dangi RS, **Yadav U**, Surolia A, Kundu S and Sundd M. (2015) The structure of the Holo-Acyl Carrier Protein of *Leishmania major* diplays a remarkably different phosphopantetheinyl transferase binding interface. Biochemistry 54(36):5632-5645.

# Conference/Seminar/Faculty Development Programme/Workshop

### ORAL PRESENTATIONS

- **Usha Yadav** and Monica Sundd (2017) "Elucidating the molecular interactions of the lipoate protein ligase B in the endogenous lipoic acid synthesis", National Conference on Protein Structure and Dynamics in Health and Agriculture, from November 3-4, 2017, at Jamia Milia Islamia University, New Delhi.
- **Usha Yadav** and Monica Sundd (2017) "Unraveling the molecular interactions of the lipoate protein ligase B during lipoic acid synthesis", YES symposium from October 5-6, 2017, organized by National Institute of Immunology, New Delhi.
- **Usha Yadav** and Monica Sundd (2017) "Unraveling the interactions of octanoyltransferases", Protein Society Meet, Delhi on January 28, 2017 at Indian Institute of Technology, New Delhi.

## POSTER PRESENTATIONS

- **Usha Yadav** and Monica Sundd (2018) "Insights into the molecular interactions of the lipoate protein ligase B during lipoic acid synthesis", 42<sup>nd</sup> Annual Meeting of the Indian Biophysical Society, March 9-11, 2018, IISER Pune.
- **Usha Yadav** and Monica Sundd (2017) "Unraveling the molecular interactions of the lipoate protein ligase B during lipoic acid synthesis", 86<sup>th</sup> Annual Conference of Society of Biological Chemists on Emerging Discoveries in Health and Agricultural Sciences, November 16-19, 2017, Jawaharlal Nehru University, New Delhi.
- **Usha Yadav** and Monica Sundd (2017) "Characterization of the lipoate protein ligase B (Octanoyltransferase) involved in the endogenous lipoic acid synthesis pathway of *Leishmania major*", Annual Symposium of the Indian Biophysical Society, March 23-25, 2017, IISER, Mohali.

- **Usha Yadav** and Monica Sundd (2015) "Biochemical characterization of *Leishmania major*'s Lipoate protein ligase/octanoyltransferase", Parasitology 2015-A Conference on Recent Trends in Parasitology, March 20-21, 2015, Jawaharlal Nehru University, New Delhi.
- **Usha Yadav** and Monica Sundd (2015) "TAMIFLU: A magic wand for influenza", National Science Day, February 28, 2015, National Institute of Immunology, New Delhi.
- **Usha Yadav** and Monica Sundd (2015) "Biochemical characterization of Lipoate protein ligase/octanoyltransferase of *Leishmania major*, National Symposium on Biophysics and Golden Jubilee Meeting of the Indian Biophysical Society, February 14-17, 2015, Jamia Milia Islamia University, New Delhi.
- **Usha Yadav** and Monica Sundd (2014) "Purification and biochemical characterization of Lipoate protein ligase/octanoyltransferase of *Leishmania major*", BioWorld 2014: Protein Structure and Function, December 12-14, 2014, Indian Institute of Technology, New Delhi.
- Preeti Gupta, **Usha Yadav**, P. K. Sahoo and Aparna Dixit (2013) "Recombinant expression and purification of RNA2-encoded capsid protein of betanodavirus", Symposium on Fish Genomics, January, 2013, Central Institute of Freshwater Aquaculture, Bhubaneswar.
- Amit Kumar, Manish Shandilya, Rudra kashyap, Usha Yadav, V.A. Semionkin, Michael Oshtrakh, Suneel Kateriya and Suman Kundu (2013) "Discovery to applications: snapshots of a Globin journey", International Conference on Bimolecular Forms and Functions, Indian Institute of Science, Bangalore.
- Sheetal Uppal, Tanmay Vaidya, **Usha Yadav** and Suman Kundu (2012) "Characterization of amyloidogenesis of Neuroglobin", National Science Day Symposium, February, 2012, University of Delhi South Campus.
- Participated in the National Symposium organized by Department of Biochemistry, Deshbandhu College in 2010.
- Participated and presented poster in National Symposium on Molecular Cell Biology 'Catenanes' organized by Shivaji College, University of Delhi in 2009.

### Served/participated as:

- Member of the organizing committee of the "Health Mela" (extension of Innovation project SHC-311) organized in Shivaji College premises in collaboration with West District Legal Services Authority (WDLSA) for all teaching and non-teaching staff and students on 31st October, 2018.
- Participated in international e-summit on "Entrepreneurship Development through Ecotourism in Northeast India" organized by Shivaji College on 14th-15th February, 2019.
- Member of the organizing committee of the National Symposium on "Recent Advances in Biological Sciences" organized by the Department of Biochemistry, Shivaji College on 10<sup>th</sup> April, 2019.
- Member of Alumni committee 2019
- Editor of "Biokemi" 2019: Annual edition of the Biochemistry Magazine, Shivaji College, University of Delhi.
- Resource person of the Laboratory Skill Training Programme for Assistants/Attendants in the Chemical and Life Science laboratories under the DBT Sponsored Star College Scheme, held at Shivaji College on May 20-24, 2019.
- Supervisor of four-week Summer Training on "Basic Microbiological techniques with special reference to bacteria" organized by the Department of Biochemistry, Shivaji College, University of Delhi, under the aegis of DBT sponsored Star College Scheme, Shivaji College from June 20- July 17, 2019.
- Participated in National seminar on "Recent Trends in Biological Research and Career Prospects" organized by Department of Zoology, Shivaji College, University of Delhi, held on 27th September, 2019.
- Member of Women Development Cell 2019-2022.
- Member of Annual day report committee 2018-2019 and 2019-2020.
- Member of Annual day report and event committee 2020-2021.
- Member of the organizing committee of the International Conference on "Women's Leadership for Global Peace and Prosperity" organized by Women Development Cell, Shivaji College on 9th-10th Jan, 2020.

- Editorial team member of coffee table book "Sansmaran: A Decade of Reminiscence" published by Women Development Cell, Shivaji College, University of Delhi, 2020, ISBN: 8190-1856-24.
- Member of the organizing committee of the International Conference on "Frontiers in Biochemistry and Biotechnology: Strategies to Combat Human Diseases" organized by Department of Biochemistry, Shivaji College and South Campus, University of Delhi on 12<sup>th</sup>-13<sup>th</sup> Feb, 2020. Editorial member of the Proceedings as well.
- Editor of the proceedings of the International Conference on "Frontiers in Biochemistry and Biotechnology: Strategies to Combat Human Diseases" organized by Department of Biochemistry, Shivaji College and South Campus, University of Delhi on February 12-13, 2020.
- Organizer of webinar on "DNA Repair" organized by the Department of Biochemistry, Shivaji College, University of Delhi on April 30, 2020.
- Participated in the International webinar on "Psychological Well-Being and COVID-19: An Internal Journey" organized by Women Development Cell, Shivaji College. University of Delhi on May 7, 2020.
- Participated in the webinar on "Zebrafish Model System" organized by the Department of Biochemistry, Shivaji College. University of Delhi under the DBT sponsored Star College Scheme held on May 8, 2020.
- Program coordinator of Summer Training Program on "Research Methodology", organized by Department of Biochemistry, Shivaji College under the DBT sponsored Star College Scheme held from June 18-July 30, 2020.
- Participated in the National webinar on "Impact Centric Research: Funding Opportunities and Challenges in Framing Successful Research Proposal" organized by Research Cell, Shivaji College. University of Delhi on July 11, 2020.
- Course coordinator of one-week online FDP on "ICT enhanced teaching learning and creating MOOCs", organized by Shivaji College in collaboration with Ramanujan College from August 18-25, 2020.
- Participated in one-week online FDP on "ICT enhanced teaching learning and creating MOOCs", organized by Shivaji College in collaboration with Ramanujan College from August 18-25, 2020.
- Participated in webinar entitled "Combating the Millennium Pandemic: Diagnostics and Infection Prevention" organized by Department of Zoology, Shivaji College, University of Delhi on September 18, 2020.
- Member of Shivaji College NAAC team 2020
- Participated in International webinar entitled "Using Oligonucleotides as drugs: The story of siRNA, ASO and Aptamers" organized by Department of Biochemistry, Shivaji College, University of Delhi on September 25, 2020.
- Served as an organizing committee member of an International webinar entitled "The Malleable Brain" organized by Department of Biochemistry, Shivaji College, University of Delhi on October 10, 2020.
- Participated in webinar on the Response of the DBT's Autonomous Institutes to COVID-19 (Part-III) organized by India Alliance on October 15, 2020.
- Served as an organizing committee member of online workshop entitled "*Drosophila melanogaster*: A beginner's guide to culturing and maintenance" organized by Department of Biochemistry, Shivaji College, University of Delhi on November 12, 2020.
- Served as an organizing team member of five-day National Workshop with hands-on training through virtual platform on "Bioinformatics and Biostatistics: A Beginner's Guide" organized by Department of Biochemistry, Shivaji College, University of Delhi from January 16-20, 2021.
- Star College Scheme member- Department of Biochemistry (2019-2022).
- Served as resource person for Inter College Laboratory Skill Training Programme for Assistants/Attendants in the Chemical and Life Science Laboratories, organized under the aegis of Star College Scheme from February 8-15, 2021.
- Organizing team member of Online Alumni Meet-2021 held on March 13, 2021, organized by Department of Biochemistry.
- Resource person for the Workshop for School Teachers in Biological and Chemical Science organized by Department of Biochemistry, Shivaji College, University of Delhi from March 22-

- 26, 2021.
- Organizing team member of Annual Academic Festival: BIOCHAPERONES 2021, organized by Department of Biochemistry, Shivaji College, University of Delhi on April 6, 2021.
- Participated in Virtual lab visits- JNU and RCB- April 12 and 13, 2021.
- Program coordinator and resource person of Summer Training Program on "Research Methodology 2.0", organized by Department of Biochemistry, Shivaji College under the DBT sponsored Star College Scheme held from June 21-July 20, 2021.
- Resource person for the webinar on "Navigation of NCBI and UniProt", organized by Department of Biochemistry, Shivaji College under the DBT sponsored Star College Scheme on July 19, 2021.
- Program Coordinator of International Virtual Lab Tour of "The Stern Lab Department of Pathology University of Massachusetts Medical School, Worcester, Massachusetts, US" organized by Department of Biochemistry, Shivaji College under the DBT sponsored Star College Scheme on July 31, 2021.
- Served as resource person for Intra College Laboratory Skill Training Programme for Assistants/Attendants in the Chemical and Life Science Laboratories, organized under the aegis of Star College Scheme from August 11-17, 2021.
- Participated in the webinar on 'Blockchain Technology and its application in Cryptocurrencies' organised by Department of Commerce, Shivaji College, on July 29, 2021.
- Participated in a webinar entitled "Genetically Engineered Vaccines: From Clones to Clinical Trials", organized by the Department of Zoology, Shivaji College on 16 August 2021.
- Served as resource person for Inter College Laboratory Skill Training Programme for Assistants/Attendants in the Chemical and Life Science Laboratories, organized under the aegis of Star College Scheme from September 14-20, 2021.
- Participated in a webinar on "Mineral Nutrient Deficiency Signalling in Plants: A Functional Genomics Intervention", organized by the Department of Biochemistry, Shivaji College, University of Delhi, under the aegis of DBT sponsored Star College Scheme on August 24, 2021.
- Completed one week online Faculty Development Programme on "National Education Policy 2020: Re-Envisioning Higher Education in India" from 30 August- 07 September, 2021 organized by Teaching Learning Centre, Ramanujan College in collaboration with Shiksha Sanskriti Utthan Nyas under the aegis of Ministry of Education.
- Participated in National Level Webinar entitled 'Art of Academic Writing: A systematic approach' organised by Research & Innovation Cell, Shivaji College, on September 4, 2021.
- Participated in International webinar on "Diverse roles of immune cells in health and disease" organized by the Department of Biochemistry, Shivaji College, University of Delhi, under the aegis of DBT sponsored Star College Scheme on October 7, 2021.
- Workshop Co-coordinator and Resource Person of "Hands-on Training Workshop Using Bioinformatics Tools For Understanding Protein Biology", organized by the Department of Biochemistry, Shivaji College, University of Delhi, under the aegis of DBT sponsored Star College Scheme on October 11-12, 2021.
- Event Coordinator of International Webinar on "A SWEET SCIENCE: EMINENCE OF O-GLYCANS IN HEMATOPOIESIS", organized by the Department of Biochemistry, Shivaji College, University of Delhi, under the aegis of DBT sponsored Star College Scheme on October 21, 2021.
- Organizing team member of "Jijabai Achievers' Award Ceremony", organized by the Women Development Cell, Shivaji College, University of Delhi on September 3, 2021.
- Participated in National webinar on "Challenges in implementation of NEP 2020", organized by the Committee of Implementation of National Education Policy, Shivaji College, University of Delhi, on October 22, 2021.

# Research Guidance (Supervision of Doctoral Thesis/Dissertations)

### NA

### **Awards and Distinctions**

- 1. Best Poster award for the poster "TAMIFLU: A magic wand for influenza", presented at National Science Day, February 28, 2015, National Institute of Immunology, New Delhi.
- 2. Awarded CSIR-UGC NET (All India Test for Junior Research Fellowship & Eligibility for Lectureship) in 2012.
- 3. Awarded Delhi University South Campus M.Sc. endowment scholarship in the year 2010-2011.
- 4. Secured first position in B.Sc. (H) Biochemistry, Shivaji College in 2007-2008 and 2009-2010.

**Signature of Faculty Member**