




## Faculty Details proforma for DU Web-site

(PLEASE FILL THIS IN AND Email it to [websiteDU@du.ac.in](mailto:websiteDU@du.ac.in) and  
cc: [director@ducc.du.ac.in](mailto:director@ducc.du.ac.in))

Title	Dr.	First Name	Swati	Last Name	Saha	Photograph
Designation	Professor					
Address	Department of Microbiology University of Delhi South Campus New Delhi-110021					
Phone No	Office	24157380				
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	Mobile	9911156268				
Email	ss5gp@yahoo.co.in					
Web-Page	microbio.du.ac.in					
Educational Qualifications						
Degree	Institution				Year	
Ph.D.	Indian Institute of Science, Bangalore				1997	
M.Phil. / M.Tech.	-					
PG	Sri Venkateswara University, Tirupati				1991	
UG	Sathya Sai University, Anantapur				1989	
Any other qualification						
Career Profile						
<b>October 2011 – present:</b> Professor, University of Delhi, South Campus, New Delhi, INDIA. Research area: DNA replication and chromatin modifications in <i>Leishmania donovani</i> .						
<b>April 2008 – September 2011:</b> Associate Professor, University of Delhi, South Campus, New Delhi, INDIA. Research area: DNA replication and chromatin modifications in <i>Leishmania donovani</i> .						
<b>April 2005 – March 2008:</b> Reader, University of Delhi, South Campus, New Delhi, INDIA. Research area: DNA replication in <i>Leishmania</i> .						
<b>Nov. 2000-July 2004:</b> Postdoctoral Fellow/Research Associate, Dept. of Biochemistry & Molecular Genetics, University of Virginia, Charlottesville, Virginia, USA. Advisor: Joyce Hamlin, Ph.D. Research topic: The modulation of DNA replication by transcription, using the CHO DHFR origin as a model system.						
<b>Nov 1997 to Oct. 2000:</b> Postdoctoral Fellow/Research Associate, Dept. of Medical Biochemistry & Genetics, Texas A &						

M University, College Station, Texas, USA.

Advisor: Geoffrey Kapler, Ph.D.

Research topic: The identification of proteins involved in DNA replication in the ciliate protozoan *Tetrahymena thermophila*.

**Nov 1991- May 1997:**

Graduate student, Department of Biochemistry, Indian Institute of Science, Bangalore, INDIA.

Graduate Advisor: D N Rao, Ph.D.

Thesis topic: Elucidation of the mechanism of action of the Type III restriction enzyme R.EcoPI.

Administrative Assignments

**Member, Board of Research Studies**

**Member, Faculty of Interdisciplinary and Applied Sciences**

**Member, CIF Committee, UDSC**

**Member, Institutional Biosafety Committee**

**Member, Governing Body of Colleges**

**Member, Ad hoc Committee on Recruitment and Promotions**

Areas of Interest / Specialization

**DNA replication and chromatin modifications**

Subjects Taught

**Recombinant DNA Technology**

**Microbial Genetics**

**Molecular Biology**

Research Guidance

- |  |      |
|--|------|
| 1. Supervision of awarded Doctoral Thesis              | Five |
| 2. Supervision of Doctoral Thesis, under progress      | Six  |
| 3. Supervision of awarded M.Phil dissertations         | None |
| 4. Supervision of M.Phil dissertations, under progress | None |

Publications Profile

Chandra U, Yadav A, Kumar D, Saha S (2017). Cell cycle stage-specific transcriptional activation of cyclins mediated by HAT2-dependent H4K10 acetylation of promoters in *Leishmania donovani*. *PLoS Pathog.* Sep 22;13(9):e1006615. Impact factor: 6.6

Yadav, A, Chandra, U, & **Saha, S.** (2016). Histone acetyltransferase HAT4 modulates navigation across G2/M and re-entry into G1 in *Leishmania donovani*. *Scientific Reports* **6**: 27510 DOI: 10.1038/srep27510. Impact factor: 4.3

Kumar, D, & **Saha, S.** (2015). HAT3-mediated acetylation of PCNA precedes PCNA monoubiquitination following exposure to UV radiation in *Leishmania donovani*. *Nucleic Acids Res.* doi: 10.1093/nar/gkv431. Impact factor: 10.2

Goswami, K, Arora, J, & **Saha, S.** (2015). Characterization of the MCM homohexamer from the

thermophilic euryarchaeon *Picrophilus torridus*. *Scientific Reports* **5**: 9057 DOI: 10.1038/srep0907. Impact factor: 4.3

Arora, J, Goswami, K, & **Saha, S.** (2014). Characterization of the replication initiator Orc1/Cdc6 from the archaeon *Picrophilus torridus*. *J Bacteriol.* **196**: 276-286. Impact factor: 3.14

Kumar, D, Minocha, M, Rajanala, K, & **Saha, S.** (2012). The histone H4 lysine 14 acetylation in *Leishmania donovani* is mediated by the MYST family protein HAT4. *Microbiology.* **158**: 328-337. Impact factor: 2.3

Minocha, N, Kumar, D, Rajanala, K, & **Saha, S.** (2011). Characterization of *Leishmania donovani* MCM4: expression patterns and interaction with PCNA. *PLoS One* **6 (7)**: e23107. Impact factor: 2.8

Minocha, N, Kumar, D, Rajanala, K, & **Saha, S.** (2011). Kinetoplast morphology and segregation pattern as a marker for cell cycle progression in *Leishmania donovani*. *J. Euk. Microbiol.* **58 (3)**: 249-253. Impact factor: 2.69

Kumar, D, Minocha, N, Rajanala, K, and Saha, S. (2009). The distribution pattern of proliferating cell nuclear antigen in the nuclei of *Leishmania donovani*. *Microbiology.* **155**, 3748-3757. Impact factor: 2.3

Kumar, D, Mukherji, A & Saha, S. (2008). Expression and subcellular localization of ORC1 in *Leishmania major*. *Biochem Biophys Res Commun.* **375**, 74-79. Impact factor: 2.46

Saha S, Shan Y, Mesner LD, Hamlin JL. (2004) The promoter of the Chinese hamster ovary dihydrofolate reductase gene regulates the activity of the local origin and helps define its boundaries. *Genes Dev.* **18**, 397-410. Impact factor: 9.41

Saha, S, Nicholson, A & Kapler, G.M. (2001). Cloning and biochemical analysis of the Tetrahymena origin binding protein TIF1. Competitive DNA binding in vitro and in vivo to critical rDNA replication determinants. *J. Biol. Chem.* **276**, 45417-45426. Impact factor: 4.12

Rao, D. N., Saha, S. & Krishnamurthy, V. (2000). ATP-dependent Restriction Enzymes. *Progress in Nucleic Acid Research and Molecular Biology.* **64**, 1-63.

Mohammad, M., Saha, S. & Kapler, G. M. (2000). Three different proteins recognize a multifunctional determinant that controls replication initiation, fork arrest and transcription in Tetrahymena. *Nucleic Acids Res.* **28**, 843-851. Impact factor: 10.2

Saha, S. & Kapler, G. M. (2000). Allele-specific protein-DNA interactions between the single stranded DNA-binding protein, ssA-TIBF, and DNA replication determinants in Tetrahymena. *J. Mol. Biol.* **295**, 423-439. Impact factor: 4.63

Saha, S., Ahmad, I., Reddy, Y. V., Krishnamurthy, V. & Rao D. N. (1998). Functional analysis of conserved motifs in type III restriction-modification enzymes. *Biol. Chem.* **379**, 511-517. Impact factor: 3.27

Saha, S. & Rao, D. N. (1997). Mutations in the Res subunit of EcoPI restriction enzyme that affect ATP-dependent reactions. *J. Mol. Biol.* **269**, 342-354. Impact factor: 4.63

Saha, S. & Rao, D. N. (1995). ATP hydrolysis is required for DNA cleavage by EcoPI restriction enzyme. *J. Mol. Biol.* **247**, 559-567. Impact factor: 4.63

#### Research Projects (Major Grants)

S.No.	Project Title	Funding agency	Amount	Sanction date and Duration
1.	Investigating DNA replication protein Cdc45 in <i>Leishmania donovani</i>	DST	~49.5 lakhs	2015-2018
2.	Investigation of the roles of the GNAT-family histone acetyltransferases Elp3a and Elp3b in the protozoan <i>Leishmania donovani</i>	DBT	~ 67.5 lakhs	2016-2019

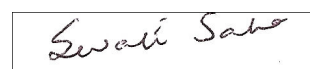
#### Awards and Distinctions

- 1998 - Giri Memorial Award for the best thesis of the year 1997, Indian Institute of Science, Bangalore. INDIA.  
 1993 - Senior Research Fellowship, UGC, INDIA.  
 1991 - Junior Research fellowship, UGC, INDIA.  
 1989 - Gold-medallist in B.Sc., SSSIHL, Anantapur.

#### Association With Professional Bodies

1. *Editing*
2. *Reviewing*
3. *Advisory*
4. *Committees and Boards*
5. *Memberships*  
 Association of Microbiologists of India  
 Society of Biological Chemists of india  
 International Society of Protistologists
6. *Office Bearer*

#### Other Activities



Signature of Faculty Member