




## Faculty Details proforma for DU Web-site

Title	Dr.	First Name	Sharmila	Last Name	Basu-Modak	Photograph
Designation		<b>Professor</b>				
Address		<b>Department of Zoology University of Delhi Delhi 110 007</b>				
Phone No	Office	<b>+ 91-11-2766 7212 Ext. 133</b>				
	Residence	<b>+91-11-2766 2646</b>				
	Mobile					
Email		<a href="mailto:sbasumodak@zoology.du.ac.in">sbasumodak@zoology.du.ac.in</a> <a href="mailto:sbasumodak@hotmail.com">sbasumodak@hotmail.com</a>				
Web-Page						
<b>Educational Qualifications</b>						
Degree		Institution			Year	
<b>Ph.D. (Zoology)</b>		<b>University of Poona</b>			<b>1993</b>	
<b>M.Sc. (Zoology)</b>		<b>University of Poona</b>			<b>1984</b>	
<b>B.Sc. (Zoology-principal subj)</b>		<b>University of Poona</b>			<b>1982</b>	
<b>Career Profile</b>						
<p>Since July 2012: <b>Professor in the Department of Zoology, University of Delhi, Delhi.</b></p> <p>November 2006-June 2012: <b>Associate Professor in the Department of Zoology, University of Delhi.</b></p> <p>October, 2003 - October 2006: <b>Reader in the Department of Zoology, University of Delhi, Delhi.</b></p> <p>May, 2000-September 2003: <b>Research officer in the Department of Pharmacy and Pharmacology, University of Bath, Bath, United Kingdom.</b></p> <p>February, 1999-April 2000: <b>Expert teacher for various courses in the Department of Zoology, University of Poona, Pune, India.</b></p> <p>October, 1995-January 1999: <b>Marie Heim-Vogtlin fellow in the Institute of Animal Biology, University of Lausanne, Lausanne, Switzerland.</b></p> <p>September, 1993-June, 1995: <b>Postdoctoral fellow in the Physical Carcinogenesis Unit, Swiss Institute for Experimental Cancer Research (ISREC), Epalinges, Switzerland.</b></p> <p>November, 1990-August, 1993: <b>Research fellow in the Physical Carcinogenesis Unit, ISREC, Epalinges, Switzerland.</b></p>						
<b>Areas of Interest / Specialization</b>						
Specialization <b>Molecular and Cell Biology</b> Areas of interest <b>Molecular genetics of heme oxygenase; Heme metabolism during embryogenesis</b>						
<b>Subjects Taught</b>						
<b>Structure &amp; function of Genes</b> <b>Molecular Cell Biology</b> <b>Comparative Animal Physiology</b>						
<b>Research Guidance</b>						
Supervision of Doctoral Thesis						
<b>Awarded: 5</b>						

**Submitted: 1**

**Ongoing: 4**

Supervision of M. Phil. Thesis

**Awarded: 1**

#### Publications Profile

##### Books/Monographs (Authored/Edited)

**Dubey, N., Singh, R., Sharma, A. K., Basu-Modak, S., & Singh, Y.** 2015. *The Survivors of the Extreme: Bacterial Biofilms*. In *Microbial Factories*, ed. V. C. Kalia, Vol. 2, 161-182, Springer India.

**Basu-Modak, S. and Tyrrell, R.M.** 2001. *Modulation of gene expression by solar ultraviolet radiation in Sun protection in man*, ed. P.U. Giacomoni, 303-320, Elsevier Science B.V.

**Modak, S.P., Deobagkar, D.D., Leuba-Gfeller, G. and Basu-Modak, S.** 1986 *The biology of human aging in Symposia of the society for the study of human biology*, ed. A.H. Bittles and K.J. Collins, Vol. 25, 17-32.

##### Best Research papers published in Refereed/Peer Reviewed Journals

**Basu-Modak S, Ali D, Gordon M, Polte T, Yiakouvaki A, Pourzand C, Rice-Evans C, Tyrrell RM.** 2006. *Suppression of UVA-mediated release of labile iron by epicatechin--a link to lysosomal protection*. **Free Radic Biol Med.** **41(8): 1197-204.**

**Nadra K, Anghel SI, Joye E, Tan NS, Basu-Modak S, Trono D, Wahli W, Desvergne B.** 2006. *Differentiation of trophoblast giant cells and their metabolic functions are dependent on peroxisome proliferator-activated receptor beta/delta*. **Mol Cell Biol.** **26(8): 266-81.**

**Basu-Modak, S., Gordon, M.J., Dobson, L.H., Spencer, J.P.E., Rice-Evans, C. and Tyrrell, R.M.** 2003. *Epicatechin and its methylated metabolite attenuate UVA-induced oxidative damage to human skin fibroblasts*. **Free Radical Bio Med.** **35: 910-921.**

**Michalik, L., Desvergne, B., Tan, N.S., Basu-Modak, S., Escher, P., Rieusset, J., Peters, J.M., Kaya, G., Gonzalez, F.J., Zakany, J., Metzger, D., Chambon, P., Duboule, D. and Wahli, W.** 2001. *Impaired skin wound healing in PPAR $\alpha$  and PPAR $\beta$  mutant mice*. **J Cell Biol.** **154: 799-714.**

**Basu-Modak, S., Braissant, O., Escher, P., Desvergne, B., Honegger, P. and Wahli, W.** 1999. *Peroxisome proliferator activated receptor  $\beta$  regulates acyl-CoA synthetase 2 in reaggregated rat brain cell cultures*. **J Biol Chem.** **274: 35881-35888.**

**Basu-Modak, S., Luscher, P. and Tyrrell, R.M.** 1996. *Lipid metabolites involvement in the activation of the human heme oxygenase-1 gene*. **Free Radic Biol Med.** **20: 887-897.**

**Vile, G.F., Basu-Modak, S., Waltner, C. and Tyrrell, R.M.** 1994. *Heme oxygenase-1 mediates an adaptive response to oxidative stress in human skin fibroblasts*. **Proc Natl Acad Sci USA.** **91: 2607-2610.**

**Basu-Modak, S. and Tyrrell, R.M.** *Singlet oxygen: A primary effector in the UVA/near visible light induction of the human heme oxygenase gene*. 1993. **Cancer Res.** **53: 4505-4510.**

##### Recent publications

**Rana, M., & Basu-Modak, S.** 2016. *Immunohistochemical analysis of Heme oxygenases, Prolactin and VEGF in the mouse placenta*. **IJSR.** **5 (11), 712-716.**

##### Other publications (Edited works, Book reviews, Festschrift volumes, etc.)

**Basu-Modak, S. and Modak, S.P.** *Sunlight as stress in human fibroblasts*. **UGC educational media network, Doordarshan, India. Telecast on April 11, 1995.**

#### Conference Organization/ Presentations (in the last three years)

Poster presented in a national conference on 'Trends in Life Sciences and Biotechnology: Innovative Paradigms' held at Maitreyi College, University of Delhi on Feb 19-20, 2019.

*Analysis of sex-ratio in mouse embryos from females which are heterozygous for Hmox1 gene*  
Sidhant Jain, Gouri and S. Basu-Modak

Two posters presented in the International Congress of Cell Biology 2018 meeting held in Hyderabad from Jan 27<sup>th</sup> to 31<sup>st</sup> :

1. *Immunohistochemical analysis of angiogenic factors in mid- and late- gestation mouse embryos and placentas.* Meenakshi Rana and S. Basu-Modak
2. *Heme metabolizing enzymes in the developing mouse embryo.* Pooja Choubey, Meenakshi Rana, Divya Bajaj and S. Basu-Modak

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

**“Structure-Function relationship in Pregnant Mare Serum Gonadotropins (PMSG)” (PI: Prof. K. Muralidhar), CSIR, May 2012-April 2015**

**“Heme oxygenase 1 in rodent embryogenesis”, DST, December 2006 - December 2010**

#### Awards and Distinctions

**1995-1996: Marie Heim-Vogtlin fellowship for women scientists awarded from the Swiss National Science Foundation, Switzerland**

**1993-1994: ISREC post doctoral fellowship from the Swiss Institute for Experimental Cancer Research**

**1987-1990: UGC-SRF**

**1985-1987: UGC-JRF**

**1984: Silver Jubilee Prize for securing highest marks in M.Sc. (III and IV semesters)**

**1984: Nandu Dixit Memorial Prize for securing first rank in M.Sc.(I and II semesters)**

**1982 – 1984: National Merit Scholarship for the course of post graduation**

**1982: Mrs. Radhabai Joshi prize awarded for standing first amongst all lady students of the college at final B.Sc. examination in April 1982**

**Shri B.R. Patankar prize awarded for passing B.Sc. examination with first rank in college**

**Manolikar Foundation prize for securing highest marks in B.Sc. Zoology**

**Shri R.K. Karandikar and Sou Indirabai Karandikar prize for topping in April 1982 examinations**

**Maganlal Chikkiwala Lonawala Prize for obtaining highest marks in third year B.Sc**

**Late Prof. T.S. Suratkar prize for standing first in third year B.Sc.**

**1976: Best Student Award for overall performance in high school**

#### Association With Professional Bodies

**Member of Governing body Holy Family College of Nursing, New Delhi from January 2018.**

**Life member, Indian Society of Cell Biology**

**Member, Indian Society if Developmental Biology**

#### Other Activities

**Member of Institutional Animal Ethics Committee (Department of Zoology, DU) since 2009.**

**Member of Board of Research Studies (Sciences) University of Delhi, for the period 24.9.12 to 23.09.14.**

**Participate actively in administrative and academic activities of the department in the capacity of member of the various departmental committees.**

**Also participated as panel member of selection committees for award of various national level fellowships.**

Signature of Faculty Member

- You are also requested to also give your complete resume as a DOC or PDF file to be attached as a link on your faculty page.