




**ZAKIR HUSAIN DELHI COLLEGE**  
(University of Delhi)  
Faculty Details

|   |  |              |   |
|---|--|--------------|---|
| <b>Dr.</b>  | <b>Sunil</b>   | <b>Kumar</b> |  |
| <b>Designation</b>  | Assistant Professor  |              |   |
| <b>Address</b>  | A-115, Gujranwala Town, Part-1, Delhi-110009                               |              |   |
| <b>Phone Number</b>   | Office   | 011-23233420 |   |
|   | Residence  | ----         |   |
|   | Mobile   | 9810155414   |   |
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| <b>Web Page</b>   |  |              |   |
| <b>Educational Qualification</b>  |  |              |   |
| <b>Degree</b>   | <b>Institution</b>   | <b>Year</b>  |   |
| <b>Ph.D. Zoology (Comparative Immuno-endocrinology)</b>   | University of Delhi  | 2011         |   |
| <b>M.Phil. (Zoology)</b>  | University of Delhi  | 2005         |   |
| <b>M.Sc. (Zoology)</b>  | University of Delhi  | 2003         |   |
| <b>B.Sc. (Hons.) Zoology</b>  | University of Delhi  | 2001         |   |
| UGC-NET-JRF   |  |              |   |
| <b>Career Profile</b>   |  |              |   |
| Teaching Experience: 13 Years<br>Research Experience: 05 Years  |  |              |   |
| <b>Administrative Assignments</b>   |  |              |   |
| 1. Convenor UG Admissions (Life Sciences) 2020, 21, 22, 23<br>2. Member, Committee of courses for UG and PG: 2017-2023<br>3. Member, Career Counseling and Placement Cell 2017-2023<br>4. Superintendent Practical Examinations 2019-2020<br>5. Convenor B.Sc. (Prog.) Life Sciences Society 2019-2020<br>6. Member, E-tendering/GeM committee 2018-2019<br>7. Teacher-In-Charge 2016-2017<br>8. Member, Time-table committee 2016-17<br>9. Member, NAAC committee: 26.04.2016 – 21.09.2016 |  |              |   |
| <b>Areas of Interest / Specialization</b>   |  |              |   |
| 1. Comparative Immuno-Endocrinology<br>2. Reproductive Physiology   |  |              |   |
| <b>Subjects Taught</b>  |  |              |   |

1. Fundamentals of Biochemistry
2. Immunology
3. Biochemistry of Metabolic Processes
4. Reproductive Biology

#### **Research Guidance**

One Ph.D. (Under supervision)

#### **Publications Profile**

##### **Research Publications:**

1. Agashe Sayli, Kumar Sunil, Rai Rishabh (2021). Exploring the Relationship Between Social Ties and Resilience From Evolutionary Framework. *Frontiers in Human Dynamics*. Vol. 3. (1-7) DOI=10.3389/fhumd.2021.683755.
2. Dhiraj Kumar Singh and Sunil Kumar (2021) Post-chemotherapy survival range analysis of lung cancer patients through statistical software ‘R’. *Journal of Biotechnology and Strategic Health Research*. Vol 5. (143-147)
3. Balbir Singh Chingtham, Sanayairangchan Kshetrimayum, DeepankarHaldwani, Monik Khumanthem, Gaurav Kaushik, Andaj Raj, Meenakshi Ahuja, Haridarshan Thakur, Irengbam Priyobata Singh, Sanjeev, Kumar, Sunil Kumar (2015). Declining Population of Phabou Nga (*Puntius sophore*), A Staple Dietary Fish in Manipur: Ensuing Concerns. *DU Journal of Undergraduate Research and Innovation* (90-101).
4. Sunil Kumar and Umesh Rai (2011). Dynorphin regulates phagocytic activity of splenic phagocytes in wall lizards: involvement of  $\kappa$ -opioid receptor-coupled AC-cAMP-PKA pathway. *J. Exp. Bio.* 214, 4217-4222.
5. Sunil Kumar and Umesh Rai (2011). Immunomodulatory role of substance P in the wall lizard *Hemidactylus flaviviridis*: An *in vitro* study. *Neuropeptides* 45: 323–328.
6. Sunil Kumar and Umesh Rai (2011). Neuropeptide Y, an orexigenic hormone, regulates phagocytic activity of lizard splenic phagocytes. *Peptides* 32 (6):1324-1329.
7. Sunil Kumar, Soma M. Ghorai, and Umesh Rai (2011).  $\beta$ -Endorphin inhibits phagocytic activity of lizard splenic phagocytes through  $\mu$  receptor-coupled adenylate cyclase-protein kinase A signaling pathway. *Gen. Comp. Endocrinol.* 171 (3):301-8.
8. Roy B, Singh R, Kumar S. and Rai U (2008). Diurnal variation in phagocytic activity of splenic phagocytes in freshwater teleost *Channa punctatus*: melatonin and its signaling mechanism *J Endocrinol.* 2008; 199(3): 471-80.

##### **Chapters in Books:**

1. Sunil Kumar and Mamta Tripathy (2023) “Anatomy and histology of female reproductive system”. In *Human Reproductive Biology and Health*, Pearsons Publication.
2. Sunil Kumar, Brototi Roy, Umesh Rai (2011). Hormonal Regulation of Testicular Functions in Reptiles. In David O. Norris and H. Lopez(Eds.),“*Hormones and Reproduction of Vertebrates*” Vol. 3-Reptiles. pp 63-88 Academic Press USA.ISBN NO. 9780123749307
3. Umesh Rai and Sunil Kumar (2008). “Pregnancy” chapter published in the E-Book on Reproductive Biology published by National Science Digital Library, CSIR, New Delhi, India (Link: <http://nsdl.niscair.res.in/handle/123456789/571>). NA.

#### **Conference Organization/ Presentations (in the last five years)**

**Organizing secretary/ Member, Organizing Committee:**

1. Five days online workshop on “Data manipulation.....statistical software ‘R’. 27.07.2020 to 31.07.2020
2. National workshop on Applications of Biotechnology, Bioinformatics and Biostatistics Tools for Science Students” 20.12.2021 to 24.12.2021
3. Outreach program: A talk on semi-conductor devices and their applications. 10.02.2022.
4. One week workshop on ‘Understanding the Technique of Histology” for UG students. 12.09.2022 to 17.09.2022
5. One week workshop on “Techniques for Gene Expression Analysis” 22.12.2022 to 28.12.2022
6. Health awareness-cum-screening camp among young adults of Delhi and NCR” 21.02.2023

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

1. DST-Funded SERB-EMR Research Project 2018-21. “Understanding the mechanism for onset of reproductive activity in seasonally breeding reptile *Hemidactylus flaviviridis*: an emphasis on the role of the kisspeptin system”
2. DU-Innovation project 2015-16: ZHC-301 “Development of user-friendly low cost portable biosensor for the detection of pesticides”
3. DU-Innovation project 2013-14: ZH-205 “Effect of heavy metals and trace elements in water on human health status in Delhi-NCR region”

**Awards and Distinctions**

1. “Dr. Shamim Haider Gold Medal” for best oral presentation in the “National Symposium on Comparative Endocrinology and Reproductive Physiology: Current Advances” held at Department of Zoology, The Institute of Science, Mumbai from December 17-19, 2009.

**Association With Professional Bodies**

1. Life member of “Indian Society for Comparative Endocrinology”.

**Other Activities**

1. Mentored 10 Students on Gyanodaya V Educational Trip “The Glory of the North East” organized by University of Delhi from December 18, 2014 to December 29, 2014.