




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

Dr.	Sunil	Kumar	
Designation	Associate Professor		
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Web Page			
Educational Qualification			
Degree	Institution	Year	
Ph.D. Zoology (Comparative Immuno-endocrinology)	University of Delhi	2011	
M.Phil. (Zoology)	University of Delhi	2005	
M.Sc. (Zoology)	University of Delhi	2003	
B.Sc. (Hons.) Zoology	University of Delhi	2001	
UGC-NET-JRF			
Career Profile			
Teaching Experience: 14 Years Research Experience: 12 Years			
Administrative Assignments			
1. Convenor UG Admissions (Life Sciences) 2020, 21, 22, 23, 24 2. Member Garden committee 2023-continuing 3. Member, Committee of courses for UG and PG: 2017-2023 4. Member, Career Counseling and Placement Cell 2017-2024 5. Superintendent Practical Examinations 2019-2020 6. Convenor B.Sc. (Prog.) Life Sciences Society 2019-2020 7. Member, E-tendering/GeM committee 2018-2019 8. Member, Maintenance committee 2018-2019 9. Teacher-In-Charge 2016-2017 10. Member, Time-table committee 2016-17 11. Member, NAAC committee: 26.04.2016 – 21.09.2016			
Areas of Interest / Specialization			

1. Comparative Immuno-Endocrinology 2. Reproductive Physiology
<b>Subjects Taught</b>
1. Fundamentals of Biochemistry 2. Immunology 3. Biochemistry of Metabolic Processes 4. Reproductive Biology 5. Cell Growth and Regulation
<b>Research Guidance</b>
One Ph.D. (Under supervision)
<b>Publications Profile</b>
<p><b>Research Publications:</b></p> <ol style="list-style-type: none"> <li>1. Agashe Sayli, Kumar Sunil, Rai Rishabh (2021). Exploring the Relationship Between Social Ties and Resilience From Evolutionary Framework. <b><u>Frontiers in Human Dynamics</u></b>. Vol. 3. (1-7).</li> <li>2. Dhiraj Kumar Singh and Sunil Kumar (2021) Post-chemotherapy survival range analysis of lung cancer patients through statistical software 'R'. <b><u>Journal of Biotechnology and Strategic Health Research</u></b>. Vol 5. (143-147).</li> <li>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 (<i>Puntiussophore</i>), A Staple Dietary Fish in Manipur: Ensuing Concerns. <b><u>DU Journal of Undergraduate Research and Innovation</u></b> (90-101).</li> <li>4. <u>Sunil Kumar</u> and Umesh Rai (2011). Dynorphin regulates phagocytic activity of splenic phagocytes in wall lizards: involvement of <math>\kappa</math>-opioid receptor-coupled AC-cAMP-PKA pathway. <b><u>J. Exp. Bio.</u></b> 214, 4217-4222.</li> <li>5. <u>Sunil Kumar</u> and Umesh Rai (2011). Immunomodulatory role of substance P in the wall lizard <i>Hemidactylus flaviviridis</i>: An <i>in vitro</i> study. <b><u>Neuropeptides</u></b> 45: 323–328.</li> <li>6. <u>Sunil Kumar</u> and Umesh Rai (2011). Neuropeptide Y, an orexigenic hormone, regulates phagocytic activity of lizard splenic phagocytes. <b><u>Peptides</u></b> 32 (6):1324-1329.</li> <li>7. <u>Sunil Kumar</u>, Soma M. Ghorai, and Umesh Rai (2011). <math>\beta</math>-Endorphin inhibits phagocytic activity of lizard splenic phagocytes through <math>\mu</math> receptor-coupled adenylate cyclase-protein kinase A signaling pathway. <b><u>Gen. Comp. Endocrinol.</u></b> 171 (3):301-8.</li> <li>8. Roy B, Singh R, <u>Kumar S.</u> and Rai U (2008). Diurnal variation in phagocytic activity of splenic phagocytes in freshwater teleost <i>Channa punctatus</i>: melatonin and its signaling mechanism <b><u>J Endocrinol.</u></b> 2008; 199(3): 471-80.</li> </ol> <p><b>Chapters in Books:</b></p> <ol style="list-style-type: none"> <li>1. Dhiraj Kumar Singh, P.R. Ragesh, Sunil Kumar (2025) “Impact of deforestation and environmental degradation on Nipah virus outbreaks: a critical review.” In: Advances in Computational Methods and Modeling for Science and Engineering, <b><u>Elsevier Publications</u></b>, Pages 269-276. ISBN 9780443300127.</li> <li>2. Sunil Kumar and Mamta Tripathy (2023) “Anatomy and histology of female reproductive system”. In Human Reproductive Biology and Health, <b><u>Pearsons Publication</u></b>. ISBN: 978-9356066328</li> <li>3. <u>Sunil Kumar</u>, Brototi Roy, Umesh Rai (2011). Hormonal Regulation of Testicular Functions in Reptiles. In David O. Norris and H. Lopez(Eds.),“<i>Hormones and</i></li> </ol>

<p><i>Reproduction of Vertebrates</i>” Vol. 3-Reptiles. pp 63-88 Academic Press USA. ISBN NO. 9780123749307</p> <p>4. Umesh Rai and Sunil Kumar (2008). “Pregnancy” chapter published in the E-Book on Reproductive Biology published by <b>National Science Digital Library, CSIR</b>, New Delhi, India (Link: <a href="http://nsdl.niscair.res.in/handle/123456789/571">http://nsdl.niscair.res.in/handle/123456789/571</a>).</p>
<b>Conference Organization/ Presentations (in the last five years)</b>
<p><b>Organizing secretary/ Member, Organizing Committee:</b></p> <ol style="list-style-type: none"> <li>1. Five days online workshop on “Data manipulation.....statistical software ‘R’. 27.07.2020 to 31.07.2020 (Under DBT-Star college scheme)</li> <li>2. National workshop on Applications of Biotechnology, Bioinformatics and Biostatistics Tools for Science Students” 20.12.2021 to 24.12.2021 (Under DBT-Star college scheme)</li> <li>3. Outreach program: A talk on semi-conductor devices and their applications. 10.02.2022. (Under DBT-Star college scheme)</li> <li>4. One week workshop on ‘Understanding the Technique of Histology” for UG students. 12.09.2022 to 17.09.2022 (Under DBT-Star college scheme)</li> <li>5. One week workshop on “Techniques for Gene Expression Analysis” 22.12.2022 to 28.12.2022 (Under DBT-Star college scheme)</li> <li>6. Health awareness-cum-screening camp among young adults of Delhi and NCR” 21.02.2023</li> </ol>
<b>Research Projects (Major Grants/Research Collaboration)</b>
<ol style="list-style-type: none"> <li>1. DBT-Star College Scheme 2020-2023.</li> <li>2. DST-Funded SERB-EMR Research Project 2018-21. “Understanding the mechanism for onset of reproductive activity in seasonally breeding reptile <i>Hemidactylus flaviviridis</i>: an emphasis on the role of the kisspeptin system”</li> <li>3. DU-Innovation project 2015-16: ZHC-301 “Development of user-friendly low cost portable biosensor for the detection of pesticides”</li> <li>4. DU-Innovation project 2013-14: ZH-205 “Effect of heavy metals and trace elements in water on human health status in Delhi-NCR region”</li> </ol>
<b>Awards and Distinctions</b>
<ol style="list-style-type: none"> <li>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.</li> </ol>
<b>Association With Professional Bodies</b>
<ol style="list-style-type: none"> <li>1. Life member of “Indian Society for Comparative Endocrinology”.</li> </ol>
<b>Other Activities</b>
<ol style="list-style-type: none"> <li>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.</li> </ol>