Research Groups in the School of Life Sciences

Research in the School of Life Sciences is organized into five thematic research areas. Candidates should indicate their choices for 2 (Two) research areas in the order of their preference in the application form. Each faculty member is listed alongside one Research Group. However, as faculty members in the School of Life Sciences conduct inter-disciplinary research, they may be conducting research in other areas either independently or jointly with faculty members in the other groups.

Research Group		Topics (For a detailed list, see SLS website www.jnu.ac.in/sls)	Faculty Members conducting research in the area mentioned *Faculty not taking students in 2023-24
No. Code	Group Name		
I GONH	PlantBiology; Virology; Biotechnology	Regulation of geminivirus pathogenesis and gene editing for virus tolerance; Plant Immunology;Stress Physiology;Genomics-assisted breeding, Fungal effectors and their host targets; Plant developmental biology, plant small RNAs and genome editing	SC(2+FN:1), AN(2), AP*, PKV(1), AS(2)
II GTWH	Microbiology; Infectology,	Cell signaling in fungi;Membrane transporters and drug discovery; Antimicrobialresistance; Stress adaptation pathways in *Candida albicans*; Cellular and Molecular parasitology.	AKM*, AKJ(2), ASK(1+FN:1), SLP(1), AB(1)
III GTRH	Genetics; Cell & Molecular Biology; Developmental Biology; Immunology	Noncoding RNAs and Stem Cells ;Transcription, chromatin and gene regulation ; Animal Developmental Biology ; Chromatin remodeling and epigenetics ; Molecular mechanisms of Mast cell effector responses in inflammatory diseases ; Nuclear Receptor signaling in human physiology and diseases	PCR*, KN*, SS*, RM(1), NP(1), VY*(FN:1)
IV GFOH	Animal Physiology; Neurosciences andSystems Biology; Radiation and CancerBiology	Cancer research ; Molecular mechanism & therapeutic intervention of Alzheimer's & Parkinson's disease; Epigenetic changes and cellular signaling in cancer cell cycle regulation; Sleep and Cognitive Science ; Radiation and cancer therapy	RPS(1), ACM(2), NM (2+FN:1), SKJ(1+FN:1), ABT(1)
V GFIH	Biochemistry; Biophysics; Bioinformatics; Nanobiology	Structural and functional analysis of human disease-related proteins; Structural and functional studies of novel *E. histolytica* proteins; Biochemistry of GPI anchor biosynthesis, regulation and function in *Candida albicans*;Comparative genomics, computational and systems biology of *Capsicum* species; Protein Amyloids and Nanobiology ; Rare Genetic Disease Exploration and Solutions	AKS*, SGN(1+FN:1), SSK(1), NR (1+FN:1) KK*, DK(1)

Number in parenthesis indicates student intake for a particular laboratory during 2023-24 academic session.

Faculty Members: Prof. Pramod Rath (PCR), Prof. K. Natarajan (KN), Prof. Shweta Saran (SS), Prof. Supriya Chakrabarty (SC), Prof. Ajay Kumar Saxena (AKS), Prof. Rana Pratap Singh (RPS), Prof. Ashis Kumar Nandi (AKN), Prof. Ashwani Pareek (AP), Prof. Alok Kumar Mondal (AKM), Prof. Atul Kumar Johri (AKJ), Prof. Sneha Sudha Komath (SSK), Prof. S. Gourinath (SGN), Prof. Arun S. Kharat (ASK), Prof. Praveen Kumar Verma (PKV), Prof. Ananda Sarkar (AS), Dr. Neelima Mandal (NM), Dr. Sushil Kumar Jha (SKJ), Prof. Rohini Muthuswami (RM), Prof. Amal C. Mandal (ACM),Prof. Nirala Ramchiary (NR), Dr. Sneh Panwar (SLP), Dr. Ashu Tiku (ABT), Dr. Niti Puri (NP), Dr. Karunakar Kar (KK), Dr. Abhisheka Bansal(AB), Dr. Vikash Yadav (VY), Dr. Devinder Kaur (DK).

Group-wise and category wise vacancy for 2023-24

Group	Entrance Exam	JRF	Foreign Nationals (FN)
I GONH	3	4	1
II GTWH	2	3	1
III GTRH	1	1	1
IV GFOH	3	4	2
V GFIH	1	3	2
TOTAL	**10**	**15**	**7**

For further details, please visit SLS website (www.jnu.ac.in/sls)