



**26<sup>th</sup> Refresher Course in Life Sciences & Biotechnology (ONLINE MODE)**  
6<sup>th</sup> December – 18<sup>th</sup> December, 2021

**Course coordinators:**

**Prof. Sandeep Saxena**, School of Biotechnology, JNU  
Email: [sandeepsaxena@mail.jnu.ac.in](mailto:sandeepsaxena@mail.jnu.ac.in)

**Dr. Sneh Lata Panwar**, School of Life Sciences, JNU  
Email: [sneh@mail.jnu.ac.in](mailto:sneh@mail.jnu.ac.in),

**List of Participants:**

SL. NO.	NAME
1	A PAUL
2	AMAR SINGH
3	ANISHA S
4	ANITA KUMARI
5	ANJANA ANAND
6	ANJU SHARMA
7	ANURADHA
8	APARNA DIXIT
9	ARCHANA KUNIYAL
10	ASHUTOSH SHARAN
11	BHARAT JOSHI
12	BHUPENDRA K PUSHKAR
13	BIPLAB KUMAR BHOWMICK
14	CHANDRA PAL SINGH
15	DEEPA KUMARI
16	DURLAV NARAYAN SINGHA
17	E. SUMATHI
18	G. SATHYA NARAYANAN
19	GAUTAM KUMAR MEGHWANSHI
20	JAWAID AHSAN

SL. NO.	NAME
21	JHIMLI DASGUPTA
22	KRUPAL KANUBHAI PATEL
23	MAMTESH SINGH
24	MANTESHKUMAR JAGAN TONDARE
25	MEENU GUPTA
26	MOHD ASHRAF ASHFAQ
27	MOHD ASHRAF KHAN
28	MUHAMMED IBRAHIM
29	NISHA SINGH TOMAR
30	PHILIP LITTO THOMAS
31	PIYUSH KUMAR PATEL
32	PREM PRAKASH
33	PRIYANKA PARASHAR
34	S. SRINIVASAN
35	SHUBHASHREE MAHALIK
36	SHWETA PANDEY
37	SIDDHARTHA SINGH DEO
38	SUBHADIP CHAKRABORTY
39	SUBRAT KUMAR PANIGRAHI
40	TARA KASHAV



**Jawaharlal Nehru University**  
UGC- Human Resource Development Centre  
New Delhi-110067



### Combined Inaugural Programme

26<sup>th</sup> Refresher Course in Life Sciences & Biotechnology  
[December 6 to 18, 2021]

4<sup>th</sup> Refresher Course in Research Methodology (IDC)  
[December 6 to 18, 2021]

(Virtual Conference Room, Zoom Meetings App.)  
(Date: December 6, 2021; Time: 11.30 AM\*)

### Our Esteemed Guests and Speakers



Prof. Rana Pratap Singh Prof. Balvinder Shukla Prof. B J Rao Prof. Brajesh Kumar Pandey

Time	Programme Details
09:30 - 11:00 hrs	Registration
11:30 - 11:40 hrs.	Welcome Address by: Prof. Brajesh Kumar Pandey, Director, UGC-HRDC, JNU, New Delhi
11:40 - 11:45 hrs.	About the 26 <sup>th</sup> Refresher Course in Life Sciences & Biotechnology by Course Coordinators
11:45 - 11:50 hrs.	About the 4 <sup>th</sup> Refresher Course in Research Methodology by Course Coordinators
11:50 - 12:10 hrs.	Address by: Prof. Rana Pratap Singh, Rector - 3, JNU, New Delhi
12:10 - 12:35 hrs.	Address by: Prof. Balvinder Shukla, Vice Chancellor, Amity University, Noida
12:35 - 12:55 hrs.	Address by: Prof. B. J. Rao, Vice Chancellor, University of Hyderabad, Telangana
12:55 - 01:00 hrs.	Vote of Thanks by: Dr. Sanjeev Sharma, Assistant Director, UGC-HRDC, JNU, New Delhi

#### Course Coordinators:

#### 26<sup>th</sup> Refresher Course in Life Sciences & Biotechnology



Prof. Sandeep Saxena  
School of Biotechnology, JNU



Dr. Sneha Lata Panwar  
School of Life Sciences, JNU

#### 4<sup>th</sup> Refresher Course in Research Methodology



Dr. Rajesh Mishra  
School of Biotechnology, JNU



Dr. Manoj Kumar  
Centre for Economic Studies & Planning, JNU

**Prof. Brajesh Kumar Pandey**  
Director  
UGC-HRDC, JNU

(Participants are requested to join and login 10 minutes before the schedule time)



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### Combined Valedictory Programme

(Virtual Conference Room, Zoom Meetings App.)  
(Date: December 18<sup>th</sup>, 2021; Time: 03.30 pm - 05.00 pm)  
Faculty Induction Programme - VI [November 22, 2021 to December 18, 2021]  
&  
26<sup>th</sup> Refresher Course in Life Sciences & Biotechnology  
&  
4<sup>th</sup> Refresher Course in Research Methodology (IDC) [December 6-18, 2021]

### Our Esteemed Guests and Speakers



Prof. Chintamani Mahapatra Prof. A. D. N. Bajpai Prof. Avinash Chandra Pandey Prof. Brajesh Kumar Pandey

Time	Programme Details
15:30-15:40 hrs.	Opening Remarks and Welcome Address by: Prof. Brajesh Kumar Pandey, Director, UGC-HRDC, JNU, New Delhi
15:40-15:45 hrs.	Presentation of Brief Course Report by: Course Coordinators of Faculty Induction Programme - VI
15:45-15:50 hrs.	Presentation of Brief Course Report by: Course Coordinators of 26 <sup>th</sup> Refresher Course in Life Sciences & Biotechnology
15:50-15:55 hrs.	Presentation of Brief Course Report by: Course Coordinators of 4 <sup>th</sup> Refresher Course in Research Methodology (IDC)
15:55 -16:10 hrs.	Address By: Prof. Chintamani Mahapatra, Rector -1, JNU, New Delhi
16:10 -16:25 hrs.	Address By: Prof. Avinash Chandra Pandey, Director, IUAC, New Delhi
16:25 -16:45 hrs.	Address By: Prof. A. D. N. Bajpai, Vice Chancellor, Atal Bihari Vajpayee Vishwavidyalaya, Chattisgarh
16:45 -17:00 hrs.	Sharing Experiences by Participants [2 participants from each course (2 Min each)]
17:00 hrs.	Vote of Thanks by: Dr. Sanjeev Sharma, UGC-HRDC, Astt. Director, UGC-HRDC, JNU, New Delhi

#### Course Coordinators:

#### Faculty Induction Programme - VI



Prof. Arun Sidram Kharat  
School of Life Sciences, JNU



Dr. Manuradha Chaudhary  
Centre of Russian Studies, SLL&CS, JNU

#### 26<sup>th</sup> Refresher Course in Life Sciences & Biotechnology



Prof. Sandeep Saxena  
School of Biotechnology, JNU



Dr. Sneha Lata Panwar  
School of Life Sciences, JNU

#### 4<sup>th</sup> Refresher Course in Research Methodology



Dr. Rajesh Mishra  
School of Biotechnology, JNU



Dr. Manoj Kumar  
Centre for Economic Studies & Planning, JNU

**Prof. Brajesh Kumar Pandey**  
Director  
UGC-HRDC, JNU

(Participants are requested to join and login 10 minutes before the schedule time)

# Schedule

## WEEK - I

DATE	10:00- 11:00 am	11:00 am – 11:30 am	11:30 am – 01:00 pm	1:00 pm – 2:00 pm	2:00 pm – 03.00 pm	3 pm - 3.30 pm	03.30 pm - 05.00 pm
Monday, December 6, 2021	Registration	Tea Break	Combined Inaugural Session	Lunch Break	Interaction with Course Coordinators	Tea Break	Dr. Dheeraj Kumar <i>“New avenues to target Mycobacterium tuberculosis”</i>
DATE	09.30 am - 11.00 am	11:00 am – 11.30 am	11:30 am-01.00 pm	1:00 pm – 2:00 pm	2.00 pm - 3.30pm	3.30 pm – 3.45pm	3:45 pm - 5:15 pm
Tuesday, December 7, 2021	<b>Prof. Pawan Dhar</b> <i>“Synthetic biology- concepts to applications”</i>		<b>Dr. Syamala Maitreyi Rajala</b> <i>“Molecular biology and an update on the ongoing pandemic”</i>		<b>Dr. Sushil Jha</b> <i>“Neuroscience research: Past, present, and future”</i>		<b>Dr. Sameer Bakhshi</b> <i>“Cancer medicines: advances in therapeutics”</i>
Wednesday, December 8, 2021	<b>Prof. Binay Panda</b> <i>“Data-driven Biology”</i>		<b>Prof. Atul Johri</b> <i>“Reverse vaccinology approach for vaccine against Streptococci”</i>		<b>Prof. Sunil Katariya</b> <i>“Optobiology and Optogenetics Therapy”</i>		<b>Dr. Kashyap Dubey</b> <i>“Process development from petriplate to bioreactor”</i>
Thursday, December 9, 2021	<b>Prof. Shweta Saran</b> <i>“Exciting experiments in developmental biology”</i>		<b>Prof. Rajendra Prasad</b> <i>“Healthcare: Where will we be in 2050?”</i>		<b>Dr. Girinath Pillai</b> <i>“Role of machine learning (not AI) in collaborative life science projects”</i>		<b>Dr. Sivaprakash Ramalingam</b> <i>“Targeted genome engineering in human stem cells”</i>
Friday December 10, 2021	<b>Dr. Niti Puri</b> <i>“Exploring cell biology of immune responses to infectious agents by flow cytometry”</i>		<b>Dr. Asif Mohammed</b> <i>“Malaria Parasite Biology and Discovery of Intervention Strategies”</i>		<b>Dr. Suman Gupta</b> <i>“Essentials of Bioentrepreneurship”</i>		<b>Dr. Vikram Singh</b> <i>“Introduction to Network Medicine”</i>
Saturday December 11, 2021	Project Work Research Design		Project Work Data tabulation & Analysis		Project Work Report Preparation		Project Work Presentation Preparation

**WEEK - II**

DATE	09.30 am - 11.00 am	11:00 am – 11.30 am	11:30 am-01.00 pm	1:00 pm – 2:00 pm	2.00 pm - 3.30pm	3.30 pm – 3.45pm	3:45 pm - 5:15 pm
Monday December 13, 2021	<b>Prof. Dwaipayan Bharadwaj</b> <i>“Epigenetics can fill the gaps of missing heritability: complex disease (T2D) is a case study”</i>	<b>Tea Break</b>	<b>Dr. Shoben Sen</b> <i>“Utility of fluorescence spectroscopy and microscopy in biology and chemistry: A primer”</i>	<b>Lunch Break</b>	<b>Dr. Subhadeep Chatterjee</b> <i>“Understanding the social language of bacteria: sspeak or not to speak?”</i>	<b>Tea Break</b>	<b>Dr. Neeru Saini</b> <i>“microRNAs as diagnostics and therapeutics for the management of human diseases”</i>
Tuesday, December 14, 2021	<b>Prof. Ashwani Pareek</b> <i>“Planting excitements”</i>		<b>Dr. Rajan Gupta</b> <i>“Global warming and Antartica”</i>		<b>Dr. Saima Aijaz</b> <i>“Precision medicine: tailored healthcare solutions”</i>		<b>Dr. Debasis Dash</b> <i>“Deciphering peptidofoms using advanced search strategies in proteogenomics”</i>
Wednesday, December 15, 2021	<b>Dr. Alok Sinha</b> <i>“Signal transduction in plants and protein-protein interactions”</i>		<b>Dr. Devinder Sehgal</b> <i>“From infection to immunity”</i>		<b>Prof GPS Raghav</b> <i>“Computational resources for healthcare”</i>		<b>Dr. Sourav Banerjee</b> <i>“Development and functions of neural circuit”</i>
Thursday, December 16, 2021	<b>Prof. Shandar Ahmed</b> <i>“Doing biology with large scale data sets”</i>		<b>Dr. Rupinder Kaur</b> <i>“Molecular pathogenicity mechanisms of medically important fungi”</i>		<b>Dr. Amit Singh</b> <i>“Decoding redox language underlying HIV latency: from molecular mechanism to therapeutic implications”</i>		<b>Prof. Ashis K Nandi</b> <i>“Basics of plant immune system”</i>
Friday, December 17, 2021	Evaluation		Evaluation		Evaluation		Evaluation
Saturday December 18, 2021	Evaluation		Feedback Session		Feedback Session & Group Discussion among participants		Valedictory Session