

MIRANDA HOUSE

University of Delhi

in association with

Makeintern & E - cell (IIT Kharagpur)

3 Days Capacity Building Workshop *On* **BIOINFORMATICS**



ROOM NO. 158
(MINI AUDITORIUM);
ROOM NO. 108
(DIGITAL RESOURCES CENTRE)



7TH TO 9TH APRIL



10:00 A.M. ONWARDS

Faculty Coordinator

Dr. Nisha Vashishta

Student Coordinator

Khushi Soni

Principal

Prof. Bijayalaxmi Nanda

CERTIFICATION PROGRAM

Makeintern & Learntoupgrade

Online & Offline Training Course Provider

PROGRAM SCHEDULE

Time	Day-1
9:30 AM-10 AM	Icebreaking session
10AM-11 AM	Introduction of Bioinformatics Application
11AM-12PM	Biological data bases-NCBI, PDB
12PM-12:30 PM	Difference tools and only online application
12:30 PM-1PM	File Formats- FAST, Genbank, EMBL, FASTQ
1PM-2PM	LUNCH
2PM-2:30PM	UCSC Genome Browser
2:30PM-3:30PM	Retrieving Sequence with coordinates and Gene Name
3:30PM-4:30PM	Restriction Digestion Analysis
	Day-2
10 AM-11AM	Recap & Introduction of primer designing
11AM-12PM	Primer Designing using UCSC Genome Browser and Primer3,insilico PCR for PrimerQC
12 PM-1PM	Gene annotation basics with ORF Finder
1PM-2PM	LUNCH
2PM-3PM	Inferring homology
3PM-4:30	Hands-on : Pairwise Alignment-BLASTn and Multiple Sequence Alignmen

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PROGRAM SCHEDULE

	Day-3
10AM-11 AM	Next Generation Sequencing Basics
11AM-12PM	Steps in NGS Data Analysis
12 PM-1PM	Introduction to Galaxy
1PM-2PM	Lunch
2PM-2:30PM	Structural Biology – Protein composition
2:30PM-3PM	Predicting Secondary structure of protein
3PM-3:30PM	Viewing protein structure in PyMol
3:30PM-4:30PM	Q&A
	Closing ceremony

