



National workshop
on

Bioinformatics:

Resources, Tools, and its Applications

(for undergraduate students)



Date: 19-27 July, 2021

Organized by

Department of Botany
Zakir Husain Delhi College
(University of Delhi)

Aim

The novel findings on biosystems are relying on advanced techniques, which generate an enormous amount of data. However, the extraction of relevant information from the available data is not possible without the utilization of bioinformatics tools. Bioinformatics is an *in silico* analysis of various molecules relevant for biological function. It is a multidisciplinary field integrating biology, chemistry, biophysics, applied math, computer science, and statistics. This emerging discipline has a great scope in pharmaceuticals, and other scientific studies, which offer various opportunities after specialization. This workshop aims to provide a basic understanding of bioinformatics and intends to develop a deep sense of interest in students for their future carrier options.

Objectives

- Introduction to NCBI and its databases
- Sequence retrieval
- Sequence homology and gene annotation
- Sequence alignment
- Phylogenetic analysis using MEGA software
- Molecular docking and deciphering secondary and tertiary structure of proteins
- Drug discovery

Level

- For beginners

Keynote Speakers



Prof. Sudhir Kumar
(Developer of MEGA software)
Director, iGEM,
Carnell Professor of Biology,
Temple University, Philadelphia, USA



Prof. Gajendra P.S. Raghava
Head, Department of
Computational Biology
Indraprastha Institute of Information
Technology (IIIT), New Delhi



Prof. Suman Lakhnpaul
Head, Department of Botany
University of Delhi, New Delhi

Resource Persons

Dr. Prashant Pant

Head and Assistant Professor
P. G. Department of Botany
Government College Daman, V. N. S. G. University

Dr. Brijesh Rathi

Assistant Professor
Laboratory For Translational Chemistry and
Drug Discovery
Hansraj College, University of Delhi

Dr. Archana Singh

Assistant Professor
Department of Botany , Hansraj College
University of Delhi

Dr. Piyush Mathur

Assistant Professor
Department of Botany, University of North Bengal

Dr. Babeeta C. Kaula

Associate Professor
Department of Botany, Zakir Husain Delhi College

Dr. Tabassum Jehan

Assistant Professor
Department of Botany, Zakir Husain Delhi College

Dr. Ashima Khurana

Assistant Professor
Department of Botany, Zakir Husain Delhi College

Dr. Ruchi Vir

Assistant Professor
Department of Botany, Zakir Husain Delhi College

Dr. Zeeshan ur Rahman

Assistant Professor
Department of Botany, Zakir Husain Delhi College

Registration

- Undergraduate students of biological sciences (including life sciences, botany, zoology, microbiology, biotechnology and allied subjects), veterinary science, agriculture science, environmental science and related courses are eligible to apply.
- Participation in the workshop does not levy any registration fee.
- Online registration is mandatory for the participation. Link for the registration: [Click here](#)
- Registration is open until **July 17, 2021**.

Instructions

- Participants must attend all the sessions (at least 80%).
- Submission of assessment of all the participated sessions (built on hands-on training) is mandatory for successful completion of workshop.
- Participation alone does not qualify to acquire e-certificates.
- Use of laptop/ computer during the workshop is desirable.

Other Details

- The platform of the workshop is **Microsoft Team**.
- All communications of the workshop will be made through registered email ID and mobile no.
- Inaugural and valedictory sessions will be live streamed through YouTube.

About College

Zakir Husain Delhi College holds the distinction of being in existence well before the establishment of Delhi University. It carries within itself a history of nearly 300 plus years as an institution of learning. The College is located in the proximity of the Walled City and is very close to Connaught Place, the centre of Delhi. This gives the college a distinctly diverse cultural ambience that cherishes composite culture and a spirit of mutual accommodation. The college has a long tradition of excellence in the disciplines of Humanities, Commerce as well as Sciences. It runs undergraduate courses in 19 disciplines, the highest number in any college of the University of Delhi.



Organising Committee

Prof. Masroor Ahmed Beg

Principal

Dr. Tabassum Jehan

Convener

Dr. Ruchi Vir

Co-convener

Dr. Ratnum K. Wattal

Coordinator

Dr. Zeeshan ur Rahman

Organizing secretary

Members:

Dr. Malti Gupta

Dr. Babeeta C. Kaula

Dr. Devayani Muley

Dr. Savindra Kumar

Dr. M. Wahid Ansari

Dr. Deepika Sharma

Dr. Ashima Khurana

Mr. Kaushal Bhargava

For more detail, please write us at:

ruchivir@zh.du.ac.in; z.rahman@zh.du.ac.in