ASSOCIATION OF ALL COMPUTER SCIENCE TEACHERS (AACST)
कॉम्प्यूटर विज्ञान शिक्षक संघ [Reg. No: Nagpur/0000492/2023] September 2023

REPORT

ON

National-Level Webinar on Computational Biology:

Exploring Emerging Frontiers

21st March 2026

ORGANIZED BY

AACST

PATRON & MENTOR

DR. ABHA KHANDELWAL FOUNDER, AACST

COORDINATOR

DR. PRAVIN GHOSEKAR

SECRETARY, AACST

Association of All Computer Science Teachers (AACST)

Presents

NATIONAL-LEVEL WEBINAR
COMPUTATIONAL BIOLOGY
Exploring Emerging Frontiers

Exploring the Convergence of Biology, Data, and Computational Intelligence

SATURDAY
21 MAR, 2026

6:30 PM – 8:00 PM (IST)
ONLINE MODE

MENTOR & CONVENER
Dr. Abha Khandelwal
Founder, AACST

PRESIDENT
Dr. S. B. Kishor
AACST

COORDINATOR
Dr. Pravin Ghosekar
Secretary, AACST

RESOURCE PERSON
Dr. Sandhya Dubey
School of Computer Engineering
Manipal Institute of Technology
Manipal Academy of Higher Education

WHO SHOULD ATTEND
- Faculty Members
- Research Scholars
- UG & PG Students
- Industry Professionals

KEY POINTS
* Foundations of Bioinformatics
* Sequence Alignment and Evolution
* Protein Structure, Motifs & Structure Prediction
* Phylogenetics and Evolutionary Analysis
* Genomics and Comparative Genomics

REGISTRATION BENEFITS
* Participation is Free
* Pre-registration Mandatory
* E-Certificates for Registered Attendees
* Limited Seats – First Come, First Served

REGISTRATION LINK
https://forms.gle/wtvpFtBDcYhp5BNr7

ORGANIZING COMMITTEE

Dr. Sabah Naseem Mrs. Priyanka Sharma

SPONSORED BY

Shri. Irfan Sheikh, Chandrapur,
in memory of his beloved Grandmother
Late Smt. Nyaz B Khan

SCAN QR CODE FOR REGISTRATION

REPORT
ON
NATIONAL-LEVEL WEBINAR
COMPUTATIONAL BIOLOGY: Exploring Emerging FRONTIERS

Date: 21st March 2026
Time: 6:30 PM – 8:00 PM (IST)
Mode: Online

Organized by:
Association of All Computer Science Teachers (AACST)

PATRON & MENTOR

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Founder, AACST

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RESOURCE PERSON

Dr. Sandhya Dubey
School of Computer Engineering
Manipal Institute of Technology
Manipal Academy of Higher Education

CHAIRPERSON

Dr. Mahesh Kulharia
Professor & Head, Bioinformatics
Central University of Himachal Pradesh

PARTICIPANTS

The webinar received an overwhelming response with **258 registered participants from 71 cities and towns across 28 states in India**, reflecting its wide national reach and strong interdisciplinary appeal.

Participants included faculty members, research scholars, undergraduate and postgraduate students, and professionals from diverse academic backgrounds such as **Computer Science, Information Technology, Life Sciences, Biology, Biotechnology, Bioinformatics, Physics, Data Science, Artificial Intelligence, Biochemistry, Veterinary Sciences, and Mathematics/Statistics**.

This diverse participation highlights the interdisciplinary nature and growing importance of computational biology.

EVENT OVERVIEW

AACST successfully organized the National-Level Webinar on *"Computational Biology: Exploring Emerging Frontiers"* on 21st March 2026 in online mode.

The webinar focused on the convergence of biology, data science, and computational intelligence, highlighting the transformation of biology into a data-driven discipline. It emphasized the role of computational tools, algorithms, and artificial intelligence in analyzing large-scale biological data and advancing modern research.

WEBINAR SESSION

Session: Computational Biology & Bioinformatics

Resource Person: Dr. Sandhya Dubey

Topics Covered:

- Introduction to Computational Biology and Bioinformatics
- Evolution of Biology in the Data Era
- Types of Biological Data: DNA, RNA, Protein
- Central Dogma of Molecular Biology
- Biological Databases: GenBank, UniProt, Protein Data Bank
- Sequence Alignment and Evolutionary Analysis
- Protein Structure and Prediction Techniques
- Role of Data Science and Computational Intelligence
- AI applications in Biology and Healthcare
- Applications in genomics and personalized medicine

KEY HIGHLIGHTS

- Insightful introduction to bioinformatics as an interdisciplinary field
- Understanding the explosion of biological data
- Importance of computational tools in biological analysis
- Exposure to AI and machine learning applications in life sciences
- Real-world relevance in genomics and healthcare
- Interactive and engaging session

LEARNING OUTCOMES

By the end of the webinar, participants were able to:

- Understand the role of computational methods in modern biology
- Gain knowledge of biological data and databases
- Appreciate interdisciplinary approaches combining biology and computing

- Learn applications of AI in biological research
- Explore emerging trends in computational biology

REGISTRATION BENEFITS

- Free participation
- E-certificates for registered attendees
- Exposure to emerging interdisciplinary domains
- Opportunity for academic interaction

REMARKS BY CHAIRPERSON

The Chairperson, **Dr. Mahesh Kulharia, Professor & Head, Bioinformatics, Central University of Himachal Pradesh**, appreciated the webinar and described it as *extremely useful and relevant* in the present academic and research context.

He commended the initiative taken by **Dr. Abha Khandelwal**, Founder, AACST, for organizing such an insightful webinar on an emerging interdisciplinary domain like computational biology.

He also highly appreciated the Resource Person, **Dr. Sandhya Dubey**, for delivering a well-structured, informative, and engaging session, highlighting the importance of integrating computational techniques with biological sciences.

He encouraged participants to further explore this field and emphasized the growing significance of bioinformatics and computational intelligence in modern scientific research.

VOTE OF THANKS

The Vote of Thanks was proposed by Ms. Rupa Rajakumari, Assistant Professor, Department of Computer Science, Hislop College, Nagpur.

She began by expressing heartfelt gratitude to the Founder, Mentor, and Convener, **Dr. Abha Khandelwal**.

She acknowledged her long association with Dr. Khandelwal since the inception of AACST and appreciated the thoughtful, visionary, and result-oriented approach. She highlighted the unique ability to foresee future directions, think beyond conventional boundaries, and translate ideas into impactful actions, which serves as a constant source of inspiration.

She expressed sincere thanks for providing a meaningful platform for learning and growth, and for continuous guidance and mentorship.

She further extended gratitude to the Resource Person, **Dr. Sandhya Dubey**, for delivering an insightful and enriching session, and to the Chairperson, **Dr. Mahesh Kulharia**, for valuable presence and guidance.

She also thanked the Coordinator, organizing team, technical support team, and all participants for active involvement and contribution to the success of the webinar.

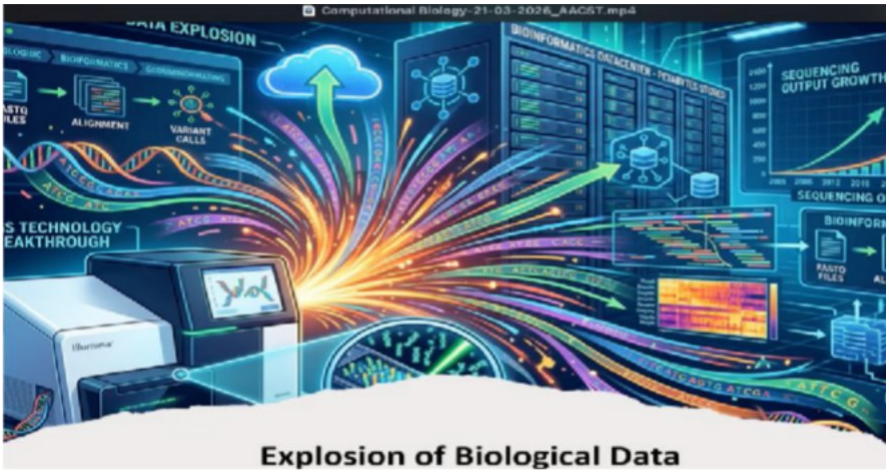
CONCLUSION

The National-Level Webinar on *"Computational Biology: Exploring Emerging Frontiers"* was a highly informative and successful academic initiative. It effectively highlighted the importance of integrating computational techniques with biological sciences.

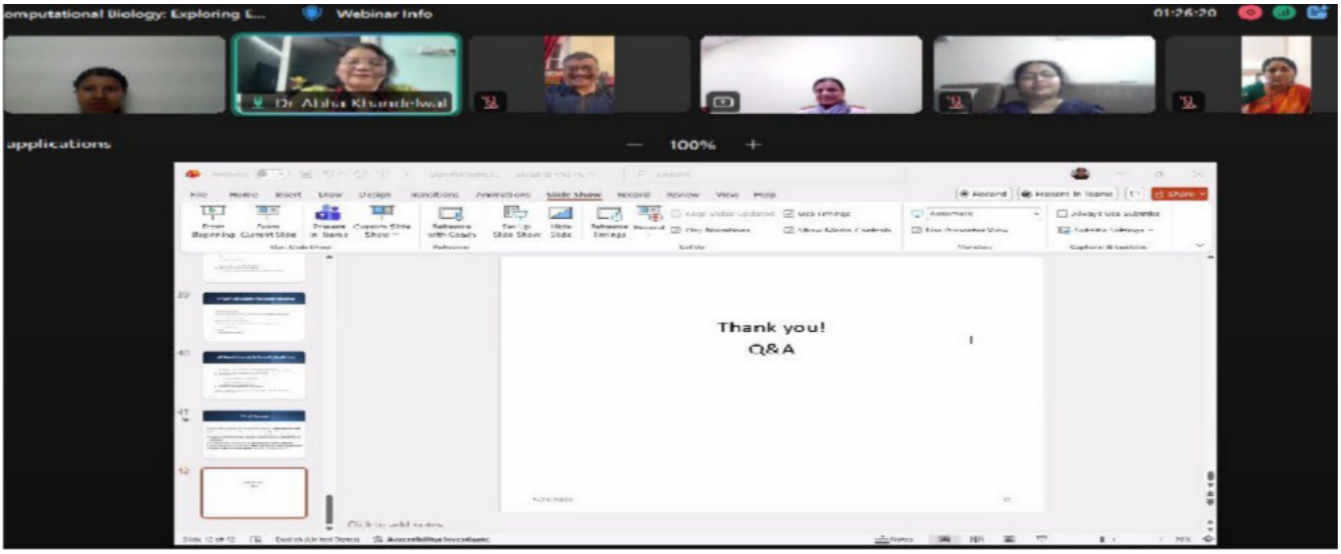
The webinar achieved its objective of promoting awareness and encouraging interdisciplinary learning among students, educators, and professionals. The enthusiastic participation and positive feedback reflected the success of the event.

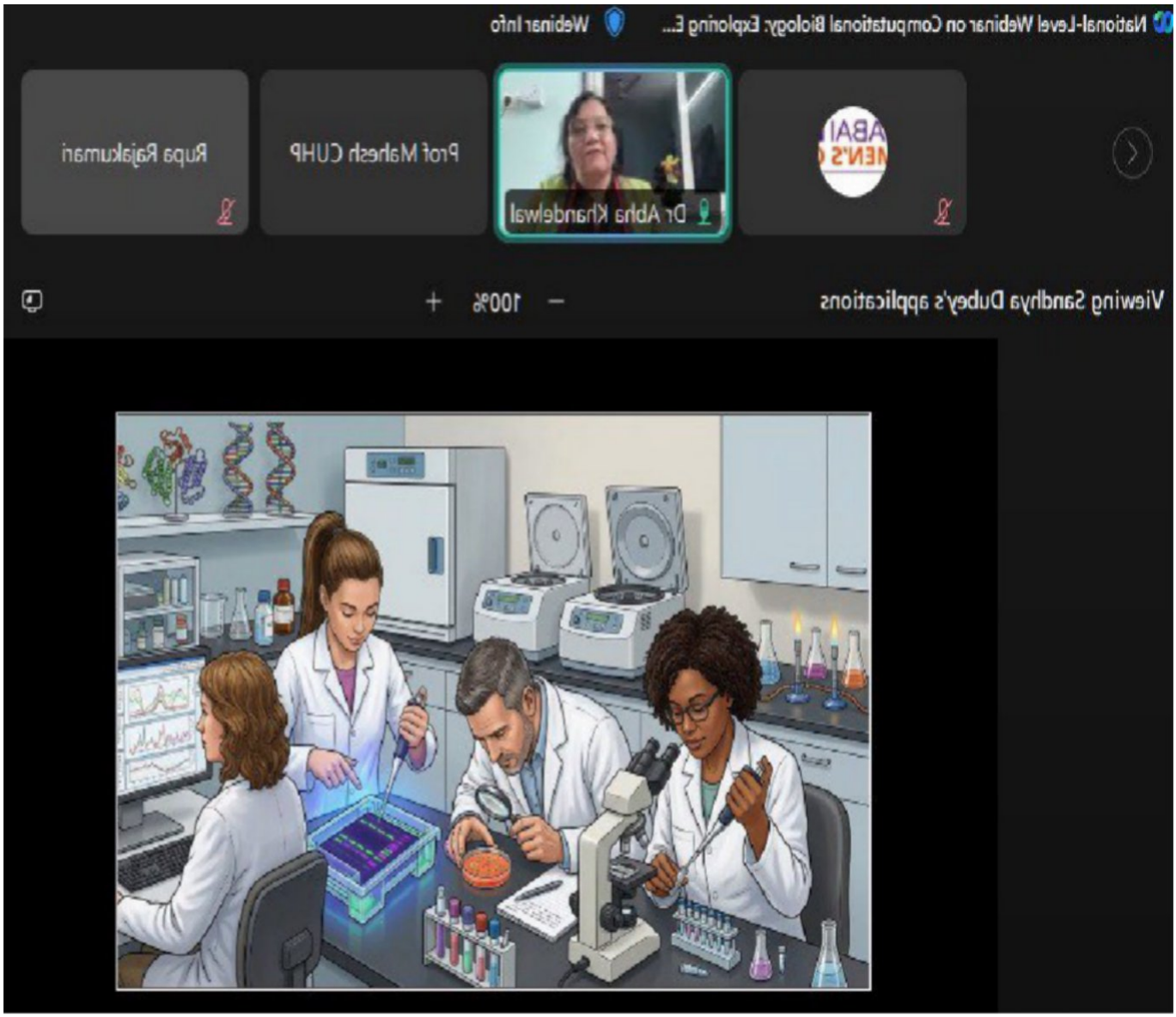
REPORT PREPARED BY

AACST EDITORIAL TEAM



Explosion of Biological Data





Role of Data Science

Data science helps in:

Managing large datasets
Cleaning and preprocessing biological data
Performing statistical analysis
Identifying patterns and correlations

For example:

Finding disease-associated genes
Analyzing gene expression patterns
Predicting biological functions"