



# ALL INDIA INSTITUTES OF MEDICAL SCIENCES (AIIMS), GUWAHATI



## Continuing Medical Education (CME)-cum-Workshop On DNA BIOLOGY, MOLECULAR DIAGNOSTICS, AND ADVANCES IN IMMUNOLOGY

on the occasion of

**DNA DAY**

&

**INTERNATIONAL IMMUNOLOGY DAY**

**25<sup>th</sup> April 2026 (Saturday) to 29<sup>th</sup> April 2026 (Wednesday)**

**Organized by**

Department of Biochemistry, AIIMS Guwahati

**Supported by**

Department of Health Research, New Delhi  
(Under Support to Institute Program)

**QR for Registration**

**Venue**

AIIMS Guwahati

**Link for Registration**

<https://forms.gle/u2d8UbXgd2nEmBja8>



**Last date for registration**

- **5 April 2026 (For Workshop, and CME + Workshop)**
- **20 April 2026 (For CME)**

**Registration is free but mandatory**

### **NOTE**

- **PHYSICAL mode ONLY.**
- For workshop, the seats are limited to 20. If the number of applications are more than the number of available seats, the applicants will be selected based on the evaluation of their submitted motivation and recommendation letters.
- The selected candidates will be intimated through email.
- **Accommodation and travel has to be arranged by the participants.**

### **WHO CAN APPLY**

- Faculty and Scientists associated in molecular diagnosis based research in Medical Colleges/Institutes/Universities.
- Residents/Demonstrators of Medical Colleges/Institutes/ Universities.
- Research Scholars working in Life Sciences/ Diagnostics stream.
- Laboratory Technologists working in Life Sciences/ Diagnostics stream.

**For queries, contact : [biochemistry@aiimsguwahati.ac.in](mailto:biochemistry@aiimsguwahati.ac.in)**

## About the program

The 5-day CME-cum-Workshop on DNA Biology, Molecular Diagnostics, and Advances in Immunology is being organized by the Department of Biochemistry, AIIMS Guwahati, on the occasion of DNA Day (25<sup>th</sup> April) and International Immunology Day (29<sup>th</sup> April). The event aims to strengthen competencies and expand trained manpower on advanced cellular and molecular tools. Sponsored by the Department of Health Research, Ministry of Health and Family Welfare, Government of India, the aim of the event is to impart the participants (faculty, residents, research scholars, demonstrators, technologists) with hands-on training in modern cellular and molecular biology tools, including DNA and RNA based techniques, PCR platforms, and emerging immunology concepts.

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### PATRON

**Prof. Ashok Puranik - Executive Director, AIIMS Guwahati**

### CO - PATRONS

**Prof. Manasi Bhattacharjee**  
**Dean (Academic), AIIMS Guwahati**

**Prof. Roonmoni Deka**  
**Dean (Research), AIIMS Guwahati**

**Prof. Sankappa P Sinhasan**  
**Dean (Examination), AIIMS Guwahati**

**Prof. Neizekhotuo Brian Shunyu**  
**Medical Superintendent, AIIMS Guwahati**

### ORGANIZING TEAM

**(DEPARTMENT OF BIOCHEMISTRY, AIIMS GUWAHATI)**

#### ORGANIZING CHAIRPERSON

**Prof. Subash Chandra Gupta**  
**Head of the Department**

#### ORGANIZING SECRETARY

**Dr. Indrajit Nath**  
**Additional Professor**

#### CO - ORGANIZING SECRETARIES

**Additional Professor: Dr. Jayanta Das**

**Associate Professors: Dr. Ashikh Seethy, Dr. Chandan Kumar Nath**

**Assistant Professor: Dr. Amit Kumar Sonkar**

## **Tentative Programme Schedule**

**CME (Open for all)**

**25<sup>th</sup> April 2026 (Saturday, 9:30 AM to 1:30 PM)**

**Venue: Auditorium, AIIMS Guwahati**

### **Lectures**

- **Immunometabolism: Linking metabolic pathways to immune regulation in chronic diseases.**
  - **Microbiome – Immune system interactions.**
  - **Immunogenomics and personalized medicine .**
  - **Systems immunology and Artificial Intelligence in disease prediction.**
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**Hands - on Workshop (Limited for 20 participants)**

**25<sup>th</sup> April 2026 (Saturday, Afternoon) to 29<sup>th</sup> April 2026 (Wednesday)**

**Venue: Department of Biochemistry, Medical College Building, 2<sup>nd</sup> Floor, AIIMS Guwahati**

### **Overview of Topics**

- **DNA isolation – Principles and methods**
  - **DNA isolation from human blood/mammalian cells**
  - **DNA visualization – Agarose gel electrophoresis**
  - **DNA quantification methods: Spectrophotometric vs fluorometric quantification**
  - **Polymerase chain reaction (PCR): Setting up conventional reaction, product analysis**
  - **RNA isolation, quantification, and quality assessment**
  - **cDNA synthesis**
  - **Quantitative polymerase chain reaction (qPCR): Data analysis, data interpretation**
  - **Absolute vs relative quantification**
  - **Droplet digital PCR (ddPCR): Reaction setup, droplet generation, PCR amplification, droplet reading and data acquisition, data analysis and interpretation**
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