

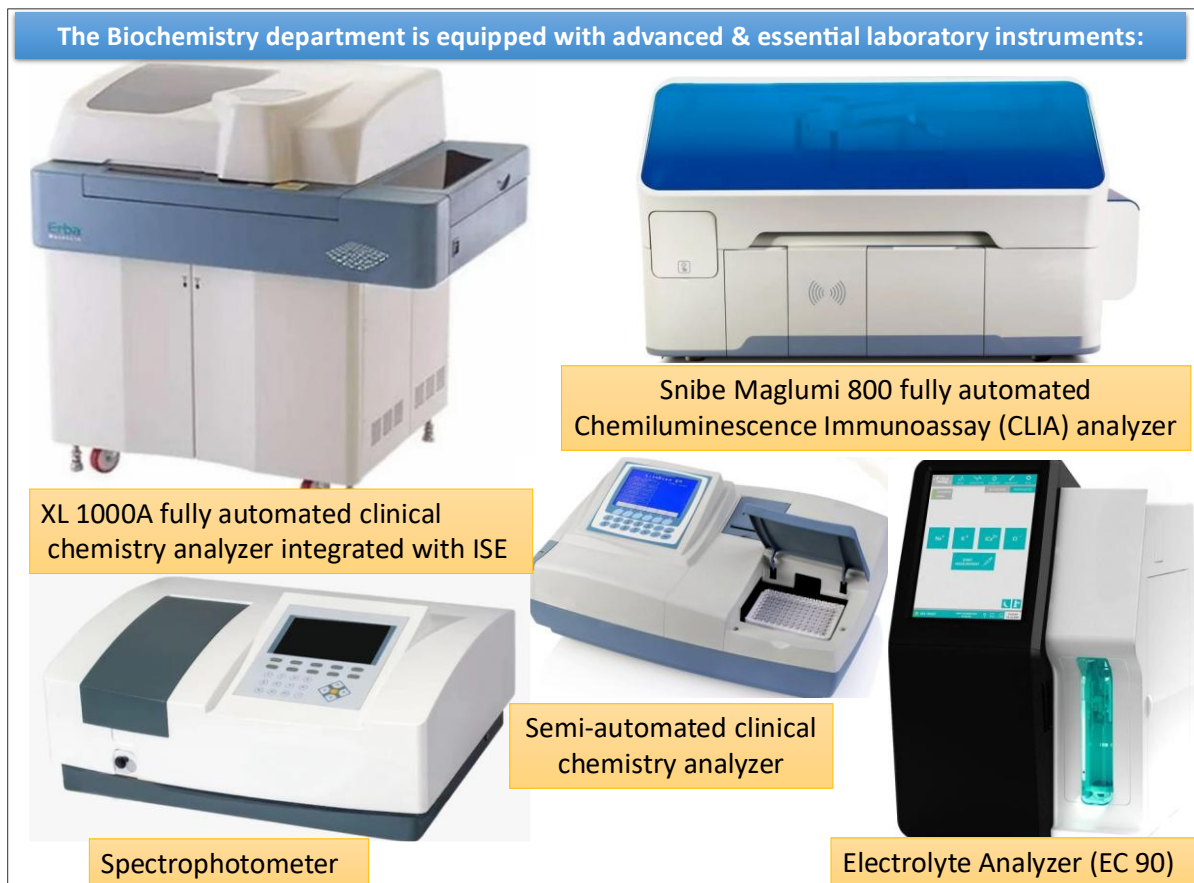
## FACILITIES AVAILABLE IN THE DEPARTMENT OF BIOCHEMISTRY

The Department of Biochemistry, Government Medical College Dharashiv is well-equipped with state-of-the-art infrastructure to support clinical services, academic excellence, and advanced research activities. The department functions round-the-clock to cater to patient care and student training needs.

### CLINICAL & RESEARCH LABORATORIES:

1. A fully automated clinical chemistry analyzer (XL 1000) integrated with ISE module, enabling simultaneous biochemical and electrolyte analysis.
2. Advanced diagnostic systems including SNIBE Fully Automatic Maglumi 800 Chemiluminescence Analyzer (CLIA),
3. Electrolyte Analyzer (EC 90) ,
4. Spectrophotometers and
5. A microplate reader used for performing Enzyme-Linked Immunosorbent Assay (ELISA) tests, widely used in diagnostic and research laboratories.
6. Well-maintained cold storage facilities including 2 Horizontal Refrigerator, 4 Vertical Refrigerator.

So as to offer the latest concepts of quality Lab operations and Lab services in Clinical Biochemistry for the weaker sections of the society.





## Central Clinical Laboratory: Delivering Reliable Diagnostic Services for Patient Care



Facilities for specialized investigations and research activities.

### 🎓 ACADEMIC INFRASTRUCTURE:

Spacious demonstration rooms and lecture halls equipped with modern ICT tools such as LCD projectors and smart boards with broadband facilities

Departmental library with essential reference books and journals.

Multimedia seminar halls for academic discussions and presentations.

### 🧪 DIAGNOSTIC & LABORATORY SERVICES (24/7):

The department provides a wide range of routine and specialized investigations, including:

1. Blood sugar level- Fasting (BSL-F)
2. Blood sugar level-PP (BSL-PP)
3. Blood sugar level R (BSL-R)

#### ◆ Liver Function Tests

4. Serum Bilirubin (Total & Direct)

5. Alanine Transaminase (ALT)
6. Aspartate Transaminase (AST)
7. Alkaline Phosphatase (ALP)
8. Serum Total Protein
9. Albumin

◆ **Kidney Function Tests**

10. Urea
11. Creatinine
12. Uric Acid
13. Serum Electrolytes

◆ **Lipid Profile**

14. Total Cholesterol
15. Triglycerides
16. Direct HDL Cholesterol
17. Direct LDL Cholesterol

◆ **Endocrinology**

18. Thyroid Profile
19. T3
20. T4
21. TSH
22. FT<sub>3</sub>
23. FT<sub>4</sub>

◆ **Cardiac Profile**

24. CK-MB
25. Lactate dehydrogenase

◆ **Anemia Profile**

26. Serum Iron
27. TIBC / UIBC
28. Serum Ferritin

◆ **Bone Profile**

29. Calcium
30. Phosphorous
31. Magnesium
32. Vitamin D Estimation

◆ **Pancreatic Profile**

33. Direct Amylase
34. Lipase

35. Serum Cholinesterase

◆ **Body Fluids**

36. Ascitic/Pleural/Synovial/CSF- Protein & Sugar

37. 24hr Urinary Protein

◆ **Special Tests**

38. Hb Electrophoresis

39. Protein Electrophoresis"

40. Chromatography"

41. Blood Gas Analysis (ABG)

 **TEACHING & TRAINING:**

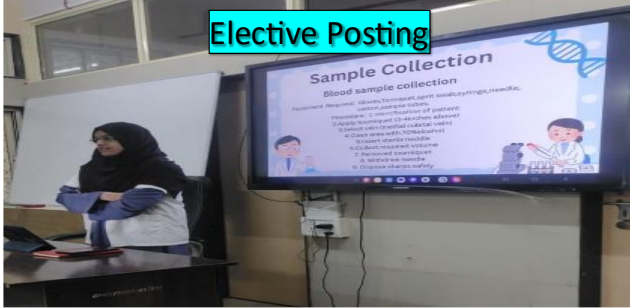
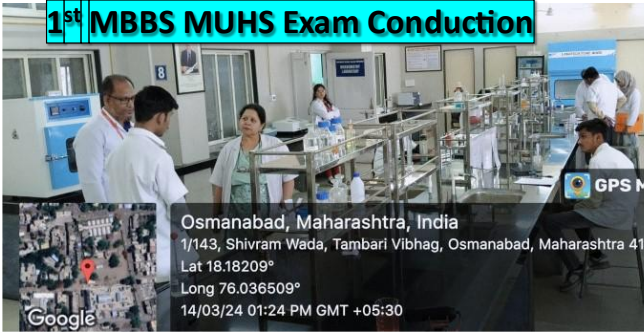
Providing comprehensive training for First Professional 100 MBBS Undergraduate (UG) Students.

Hands-on exposure to modern laboratory techniques and research methodologies

The Department of Biochemistry is committed to delivering accurate diagnostic services, fostering academic growth, and promoting innovative research in medical sciences.

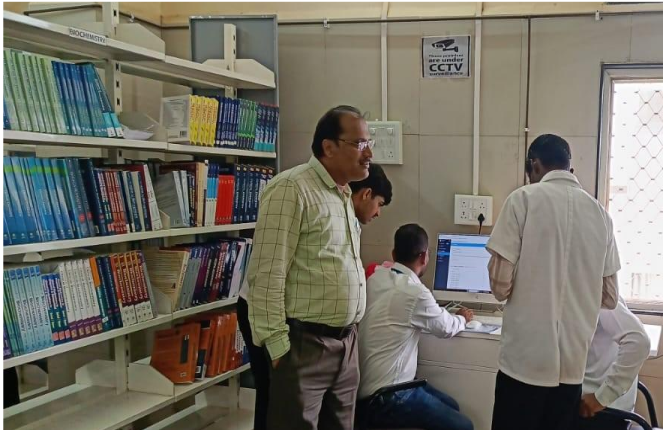
**Teaching Learning Methods**





- Igniting Learning Habits: Special Library Visit for 1st MBBS at GMC Dharashiv (As per NMC)

## From Books to Bedside: NMC-Driven Library Orientation for First MBBS Students



### ◆ GUEST LECTURES CONDUCTED:

#### 1. Gene Expression Webinar:

An insightful webinar on Gene Expression was conducted by Dr. Yogesh Pawade, Additional Professor, AIIMS Nagpur. The session provided valuable understanding of molecular mechanisms and recent advancements in gene regulation.

#### 2. Guest Lecture on Effective Theory Paper Writing:

An informative lecture on Effective Theory Paper Writing was delivered by Dr. Ashish Ajankar, Professor & Head, Department of Biochemistry, JNMC, Datta Meghe Institute of Higher Education & Research (Deemed to be University), Sawangi (Meghe), Wardha. The session focused on enhancing academic writing skills and examination performance strategies

# प्रजापत्र

19JUL2025

## शासकीय वैद्यकीय महाविद्यालय धाराशिव येथे शैक्षणिक वेबिनार यशस्वी

धाराशिव दि.१८ (प्रतिनिधी): शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव यांच्या वतीने Regulation of Gene Expression या विषयावर एक शैक्षणिक वेबिनारचे यशस्वी आयोजन करण्यात आले. या वेबिनारसाठी एम्स नागपूर येथील जीव रसायनशास्त्र विभागाचे प्रख्यात प्राध्यापक डॉ. योगेश पावडे हे प्रमुख वक्ता म्हणून लाभले होते.

डॉ. पावडे यांनी आपल्या मार्गदर्शनात जीन अभिव्यक्तीच्या नियंत्रणाची संदर्भित



या कार्यक्रमास अधिष्ठाता डॉ. शैलेंद्र चौहान आणि उप-अधिष्ठाता डॉ. मुंडेवाडी यांची प्रमुख उपस्थिती होती. कार्यक्रमाचे सुयोग्य नियोजन डॉ. धाबे (प्राध्यापक तथा विभागप्रमुख,

यांनी समर्थपणे पार पाडले. वेबिनारमध्ये महाविद्यालयाचे सर्व अध्यापक वर्ग तसेच प्रथम वर्ष एमबीबीएसचे विद्यार्थी मोठ्या संख्येने सहभागी झाले होते. या वेबिनारमुळे विद्यार्थ्यांना



धाराशिव जिल्हा 19-07-2025

### वैद्यकीय महाविद्यालयातील विद्यार्थ्यांना एम्सच्या तज्ज्ञांचे ऑनलाइन मार्गदर्शन

धाराशिव | येथील शासकीय वैद्यकीय महाविद्यालय व रुग्णालयात रेग्युलेशन ऑफ जीन एक्सप्रेशन विषयावर शैक्षणिक वेबिनार घेण्यात आला. नागपूरच्या एम्सचे तज्ज्ञ जीव रसायनशास्त्र विभागाचे प्राध्यापक डॉ. योगेश पावडे यांनी ऑनलाइन मार्गदर्शन केले. डॉ. पावडे यांनी जीन अभिव्यक्तीच्या नियंत्रणाशी संबंधित मूलभूत संकल्पना, नियामक यंत्रणा प्रक्रियेचा जीववैद्यकीय संशोधनातील उपयोगावर माहिती दिली. विद्यार्थ्यांनी उत्स्फूर्त सहभाग नोंदवला. यावेळी अधिष्ठाता डॉ. शैलेंद्र चौहान, उपअधिष्ठाता डॉ. मुंडेवाडी यांची प्रमुख उपस्थिती होती. कार्यक्रमासाठी जीव रसायनशास्त्रज्ञ प्रा. डॉ. धाबे, डॉ. सिद्दीकी, डॉ. अंजुम सय्यद, प्रा. डॉ. चेतन राजपूत यांनी पुढाकार घेतला. तांत्रिक सहकार्य अमील सोळंके केले.



GPS Map Camera

Dharashiv, Maharashtra, India  
52jp+q6v, Civil Hospital Rd, Shivram Wada, Nehru  
Chowk, Dharashiv, Maharashtra 413501, India

**Students Activities -Creative Expressions: Rangoli & Poster Making Showcase**  
by Ist Professional MBBS Studens.





### **Best Practices:**

- Our department proactively involved in Research.
- Training the undergraduate medical students in the foundation of Biochemistry and research using student centric teaching-learning methods.
- Facilitating Mentor–Mentee Engagement Sessions for MBBS Students”
- Inculcate value-based laboratory practices among the Indian Medical Graduate so as to serve humanity.
- Participation in EQAS programme for accurate and precise lab reports.
- The Biochemistry Department, GMC Dharashiv, has actively participated in various training programs conducted by YASHADA (Yashwantrao Chavan Academy of Development Administration), an ISO 9001:2008 certified institution.
- Staff of the Biochemistry Department, GMC Dharashiv, has successfully completed various courses organised by iGot (Karmayogi) Department of Personnel & Training (DoPT), reflecting dedication to continuous learning and professional excellence.

**Distinctiveness** – Launch of Fully automated Clinical Biochemistry Autoanalyzer (Xl-1000) &

- advanced CLIA’ first in Dharashiv region.

**Outreach Activities:** Providing diagnostic support for hospital and Health camps as well as for celebration of activities in association with clinical departments.

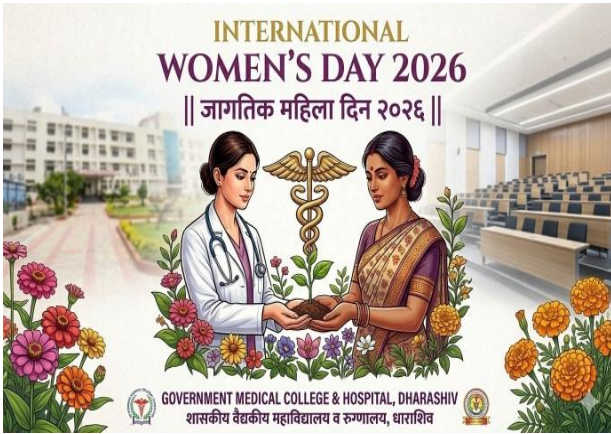
### **ONGOING RESEARCH PROJECTS:**

1. Assessment of Non-Traditional Lipid Indices: 25 Hydroxy Vitamin D and Small Dense LDL in Women with Preeclampsia. By Dr. Anjum Sayyed, Dr. Mahendrakumar Dhabe & Dr. Siddiqui.
2. Pupil Size Variation & Cholinesterase Inhibition After Pesticides Exposure in Agricultural Workers: An Observational Study by Dr. Anuja Kandle & Dr. Mahendrakumar Dhabe.
3. Elevated GGT & AST/ALT ratios: Defining the biochemical landscape of alcoholic liver disease in Rural Maharashtra" Palak Upadhyay& Dr. Mahendrakumar Dhabe.



**Other Activities**

## INTERNATION WOMEN'S DAY CELEBRATION



### Future Plans

- Molecular diagnostics laboratory
- NABL accreditation for CCL