

# DEPARTMENT OF PATHOLOGY



## Department of Pathology- overview

- Our department was started in **2010** with the inauguration of Malabar Medical College Hospital and Research Centre.
- We play an integral role in providing ***excellent teaching services and comprehensive diagnostic services*** that helps in proper patient management.
- The Pathology department has a **13 member faculty**, 8 junior residents, assisted by 17 technicians and 7 clerical staff.
- The various sections under this department are **Histopathology, Cytology, Clinical pathology & Haematology and Blood Centre**.
- All the labs are equipped with skilled personnel, high quality calibrated instruments and with regular participation in EQAS and routine internal quality control checks.



# Vision



- To ensure **good quality teaching services to undergraduate students** of various faculties like MBBS, BDS, Nursing, and allied health sciences
- To incorporate **innovative teaching methodologies** into students' curriculum
- To provide **state of the art diagnostic services** which would help in patient management, including immunohistochemistry, immunofluorescence
- To provide **advanced education and competencies for post-graduates** in diagnosis and patient care, ensuring a future with well-trained MD Pathology graduates.



## Through the years

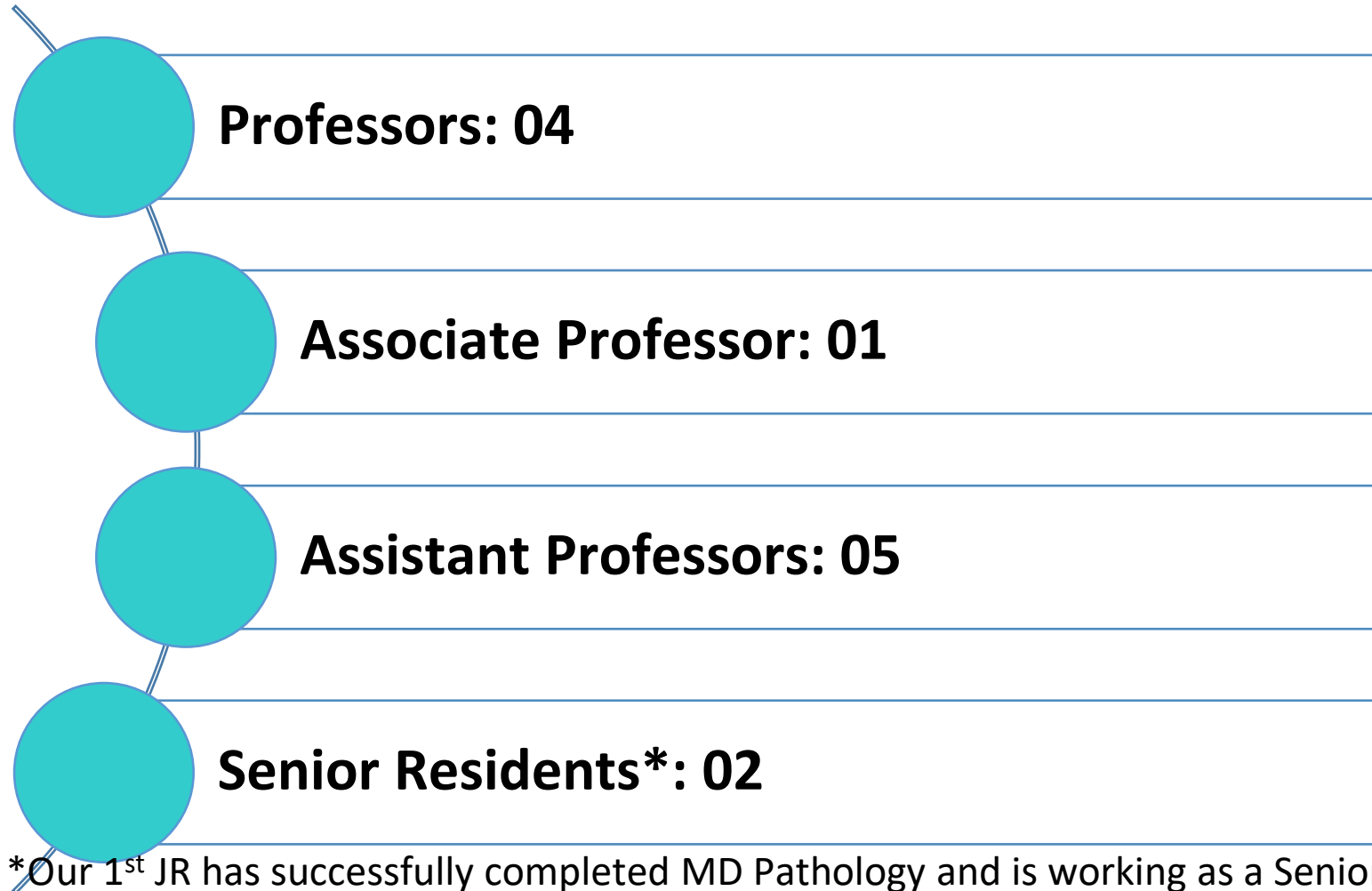
**2010:**  
Establishment of  
Department

**MBBS  
students**  
*(intake/ year):*  
200 (CBME'24)  
250 (CBME'25)

**MD  
Pathology:**  
1 JR/ year (2022)  
3 JRs/ year  
(since 2023)

**MD  
Pathology:**  
Seat  
enhancement  
**7 JRs/ year**

# Faculties



\*Our 1<sup>st</sup> JR has successfully completed MD Pathology and is working as a Senior Resident with us.



# Department of Pathology



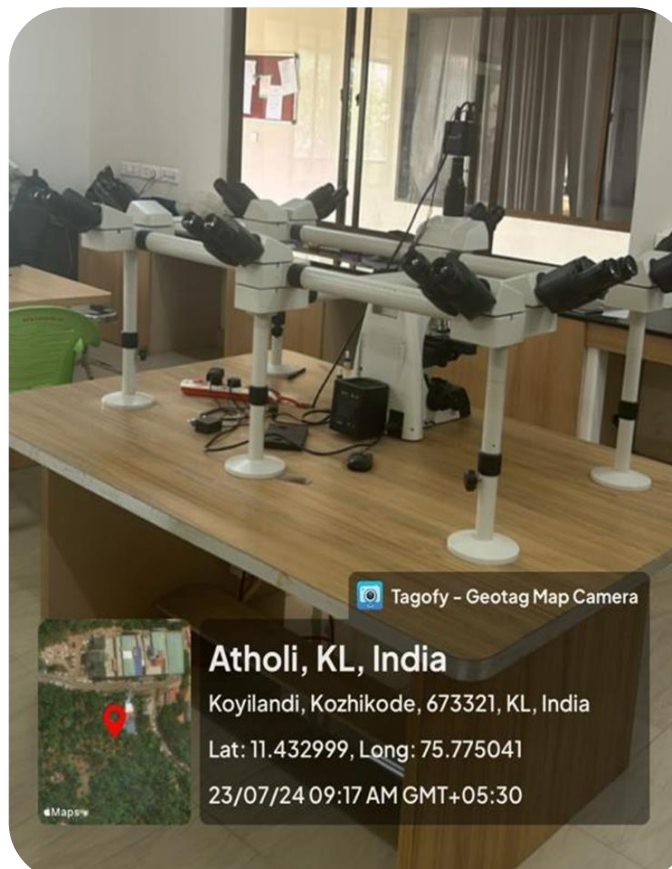
Histopathology



Hematology



Cytology



## Other facilities:

- Cryostat machine: for frozen sections
- Fluorescence microscope: for DIF/ Indirect IF
- Deca-head microscope: PG and UG slide teaching
- Department library with over 250 books

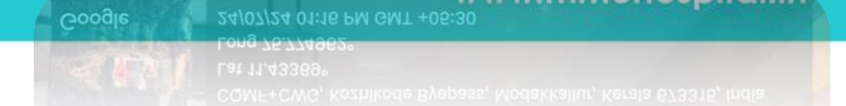
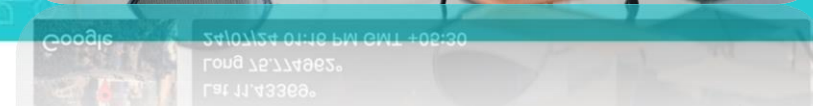
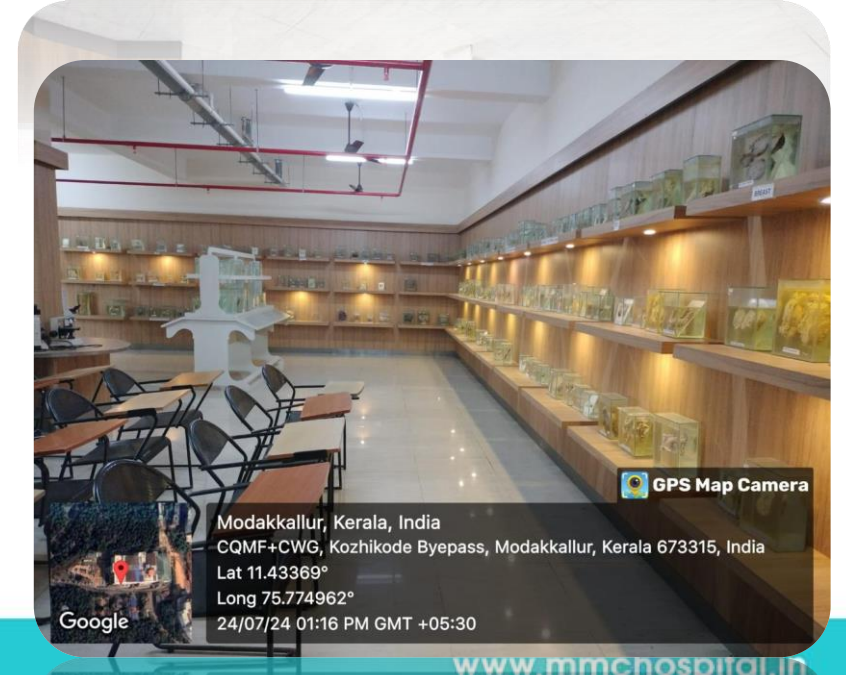
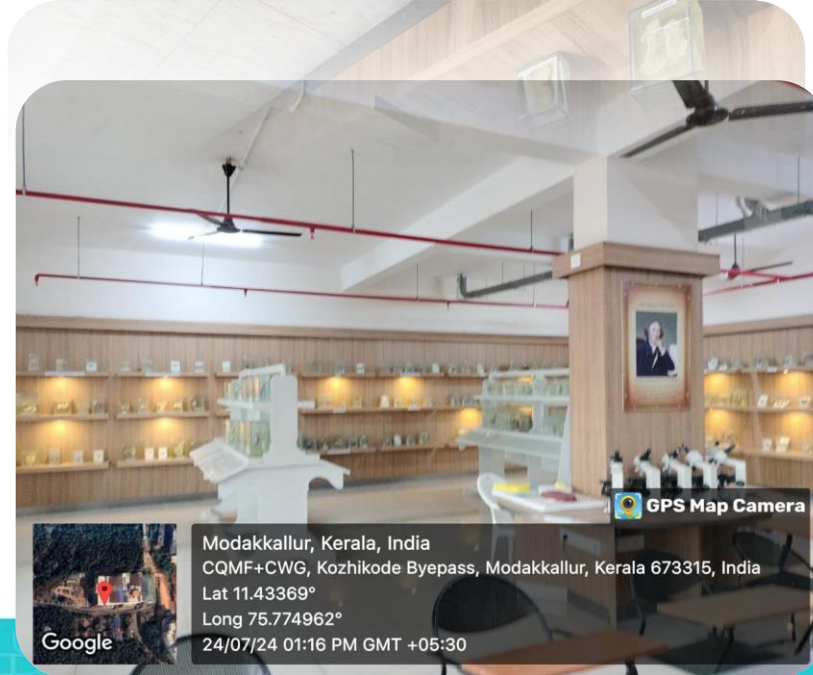


# Students' practical hall and demonstration rooms

60 workstations and 90 binocular microscopes







# Museum

State of the art museum showcasing over 500 specimens representing various pathological conditions arranged in system-wise format



# Department of Pathology: MMC activities



- MEU
- NAAC
- Scientific Committee
- Death Audit Committee
- Hospital Transfusion Committee
- RUBRO council
- Promotion Committee
- Tuberculosis cell
- Breast Clinic
- SPARC
- Cultural programmes...



# Undergraduate courses taken by dept.

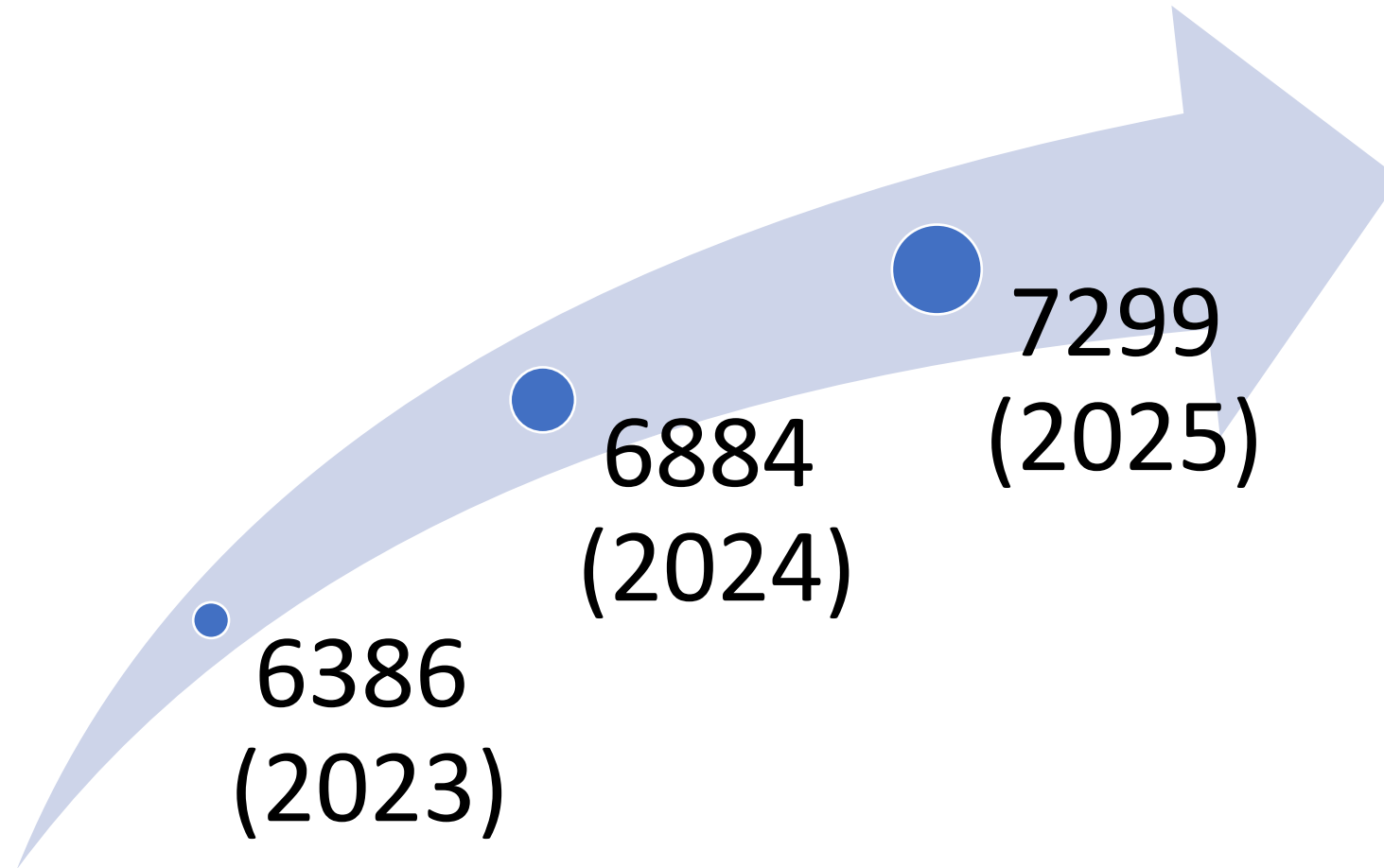


- MBBS (CBME'24 batch): 210 students
- BDS (2024 batch - regular and additional): 71 & 29 students
- Paramedical and Allied Health Science courses:
  - Bachelor of Physiotherapy (BPT)
  - Optometry
  - Diploma in Radiological Techniques (DRT)
  - Diploma in Endoscopic Technology (DET)
  - Medical Imaging Technology (MIT)
  - Emergency Medicine Technology (EMT)
  - Anaesthesia Technology (AT)
  - Respiratory Therapy (RT)
  - Bachelor of Cardiovascular Technology (BCVT)
  - Dialysis Technology (DT I & II year)

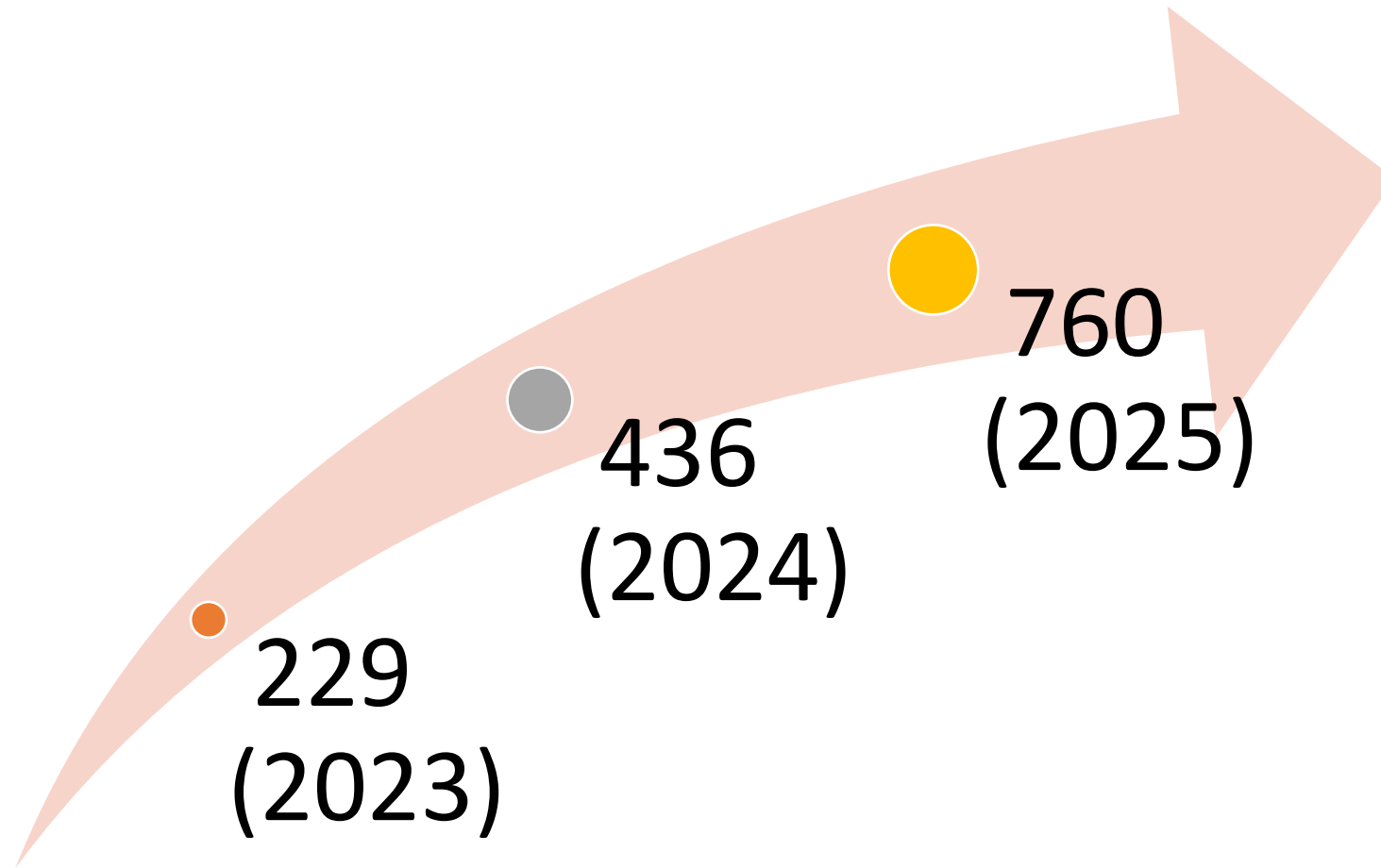




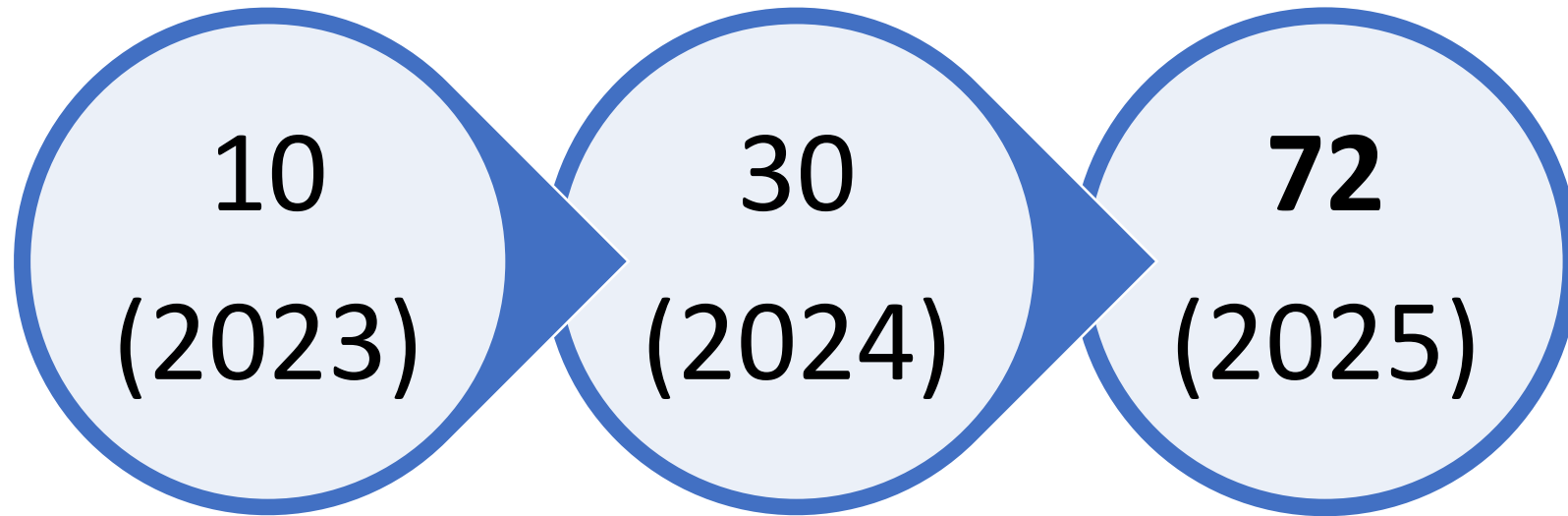
# Histopathology specimens reported



# Immunohistochemistry (per test)



# Frozen section





# Cytology

| Year | FNAC       | Pap smears  | Fluid cytology |
|------|------------|-------------|----------------|
| 2023 | 726        | 2235        | 603            |
| 2024 | 730        | 3410        | 874            |
| 2025 | <b>843</b> | <b>4823</b> | <b>613</b>     |



# Hematology

| Year | Peripheral smears | Bone marrow |
|------|-------------------|-------------|
| 2023 | 3013              | 25          |
| 2024 | 4710              | 34          |
| 2025 | <b>7453</b>       | <b>72</b>   |



# Blood Centre

In-house & outdoor camps

Awareness programs

Training workshops for NGOs

'Project Jeevana'

LifeLine: an initiative to bring students to behind the scenes of blood centre

**RUBRO council activities**



*Congratulations*  
to

**Dr Arun V J**

on the release of your book

# THE BLOOD BOOK

“A significant achievement in  
transfusion medicine and a valuable  
contribution to medical education  
and patient care.”



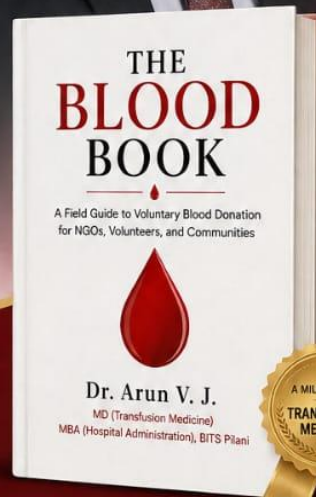
**EDUCATES**  
INFORMS PRACTICE



**INSPIRES**  
LIFESAVING ACTION



**EMPOWERS**  
COMMUNITIES



Your expertise, leadership, and research in  
**transfusion medicine** continue to  
advance safe blood practices and save lives.”



**A RESOURCE FOR TODAY.  
A LEGACY FOR TOMORROW.**

Enriching minds and strengthening  
the foundation of medical knowledge.



Rooted in evidence.  
Driven by research.  
Focused on patient safety.



Advancing transfusion medicine  
for a healthier, safer tomorrow.



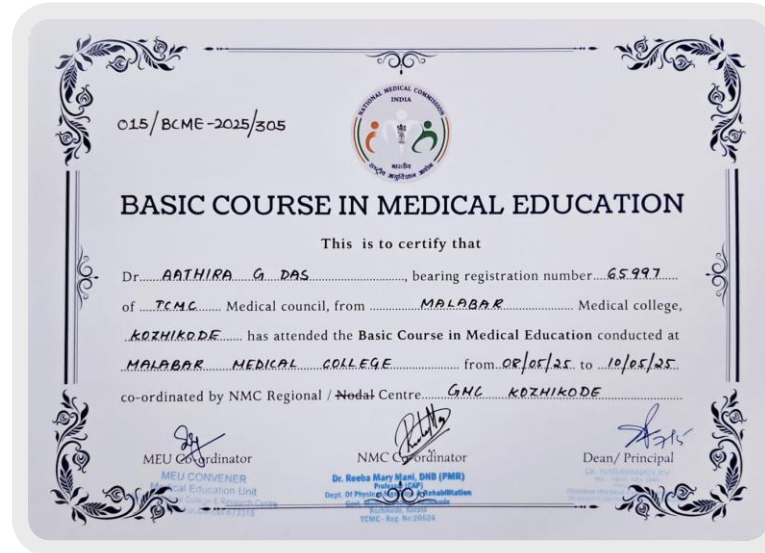
Bridging knowledge,  
volunteers, and communities  
through education.

**We are proud of your achievement  
and wish you continued success!**

With warm regards,  
**Medical Education Unit, MMC**

# A new author from MMC!





- 8 Faculties have completed the **BCME** and **BCBR** courses
- All Faculties and postgraduates have attended the **Mindray equipment training program**

# Achievements of Postgraduates

❖ Dr. Abhijith S - Poster presentation – IAPM (9/2/2025)

❖ Dr. Abhijeeth AS

IAPM (8/6/25)- poster: Basidiobolomycosis

Echoes of surprises, unforeseen diagnosis in the auditory canal :IAPM, 11/02/2024

Tight knot...A complex relationship between discoid lupus erythematosus and lymphadenitis: IAPM, August 2024

Steeling the liver: a double trouble in thalassemia, IAPM, 9/2/2025

The hidden culprit in skin: presenting as pyogranulomatous reaction: IAPM, 2025

❖ Dr. Swathi - Case Presentation in *Pathalumni*

❖ Dr Aparna J G -KAPCON 25 – Oral poster- A case report on anaplastic Medulloblastoma (3/7/25); Case presentation on leiomyoadenomatoid tumour, *Pathalumni*

❖ Dr. Dhanya – *Pathalumni* (25/4/25) – Case presentation: Intestinal Giardiasis

❖ Dr. Amal Shaji - KAPCON25 (3/7/25) - Poster on extramedullary plasmacytoma, colon; case presentation, *Pathalumni*: Parosteal osteosarcoma with intramedullary involvement, April 2026



kikuchi





# CME programmes



| Date       | Topic                                                                |
|------------|----------------------------------------------------------------------|
| 28/05/2023 | Hematvision - Hematological Malignancies and update                  |
| 05/05/2024 | Histoderm'24 - Dermatopathology CME                                  |
| 16/12/2024 | Hematology Masterclass - an in-house CME on the basics of hematology |
| 13/09/2025 | GUPath'25 - an update on genito-urinary pathology                    |







**MMC WISDOMPATH SERIES: Logo Launch**



# Research activities



## Completed in the past 3 years:

Utility of p63 in giant cell lesions of bone

Clinicopathological study of extra-nodal marginal zone lymphoma

Effectiveness of using medical health records as an educational tool

Proton pump inhibitor induced changes in gastric and duodenal mucosa and expression of beta catenin in fundic gland polyp - a cross-sectional study (THESIS)

An immunohistochemical analysis of moesin and PTEN expression in endometrial hyperplasia and endometrial carcinoma- a cross-sectional study from a tertiary care centre (THESIS)

Tumor budding score and expression of aldehyde dehydrogenase-1 in invasive breast cancer: a cross-sectional study (THESIS)



# Research activities



## Completed in the past 3 years (contd.)

Expression of p53 and beta catenin in preinvasive lesions of gall bladder

Expression of AMACR, CAIX in cystic neoplasms of kidney

Evaluation of zebrafish (*Danio rerio*) as a potential experimental host for *Rhinosporidium seeberi*  
(in collaboration with MRU, GMC Thiruvananthapuram)

Retrospective clinicopathological analysis of ovarian tumors in a rural medical college of northern Kerala



## Ongoing research:

The role of reticulocyte indices in evaluating microcytic hypochromic anemia: a cross-sectional study in a tertiary care centre, northern Kerala

Conventional cell block vs scraped cell block in cytopathology

Assessment of microsatellite instability(MSI) using immunohistochemistry in colorectal polyps: across-sectional study from a tertiary care centre in north Kerala

Assessment of p53 and Ki67 expression in meningioma: a cross-sectional study from a tertiary care hospital

Histopathological spectrum of fallopian tube lesions and their immunohistochemical profile using WT1, p53 and Ki-67

Expression of Her2/neu and p16 in different types and grades of urothelial neoplasm in a tertiary care hospital: a retrospective and prospective descriptive study

Diagnostic utility of immunohistochemical markers in differentiating benign and malignant thyroid lesion

IHC expression of BRAFV600E in papillary thyroid carcinoma & follicular-cell derived thyroid lesions: a cross-sectional comparative study





## UG Research:

Selection for KUHS  
Research Appreciation  
award 2025

*(Research submission:  
May, 2026)*



The certificate features a gold and white wavy background. At the top left is the MMC logo, and at the top right is a golden eagle emblem. The title 'KUHS RESEARCH APPRECIATION AWARD 2025' is centered at the top in bold gold letters. Below the title are two circular portraits: on the left, a woman with dark hair in a pink top; on the right, a woman with glasses in a white lab coat. Their names and batch information are printed below their respective portraits. The research title is centered below the portraits. At the bottom, the word 'Congratulations' is written in a large, elegant cursive script, followed by the text 'ANOKHA SUC 25 | MMC CALICUT'.

**KUHS RESEARCH APPRECIATION  
AWARD 2025**

  
**Jahnavi A S**  
13th batch

  
**Dr Aathira G Das**  
Dept of pathology

**Practical utility of novel platelet indices in dengue and its  
correlation with platelet transfusion outcomes: A  
Retrospective study in a tertiary care centre, northern  
kerala.**

*Congratulations*

ANOKHA SUC 25 | MMC CALICUT

# Achievements: MBBS students (Pathology)



Our MBBS student, HARISANKAR S VARIER won **best case e-poster award** in a state-level CME, JUBICON 2024 with a rare case of gastric schwannoma in a young female (Guide: Dr. Aathira G. Das)

Selection for case presentations by our students in JUBICON 2025, Amala Medex Concordium 2025; Submissions for the future CMEs (Oncoscope 2026, Erevna 4.0 KMC Manipal) (Guide: Dr. Aathira G. Das)



# Teaching sessions for postgraduates



- Slide seminars
- Gross discussions
- Journal reviews
- Topic presentations
- Clinico-pathological case discussions



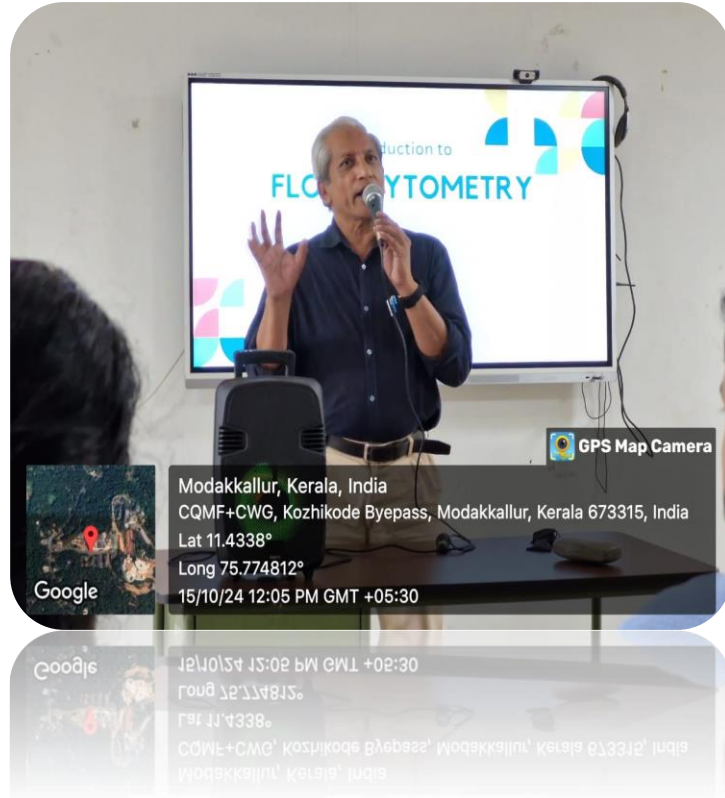


# CALIPATH 2025

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**An extensive postgraduate  
training workshop,  
organized by GMC Calicut**

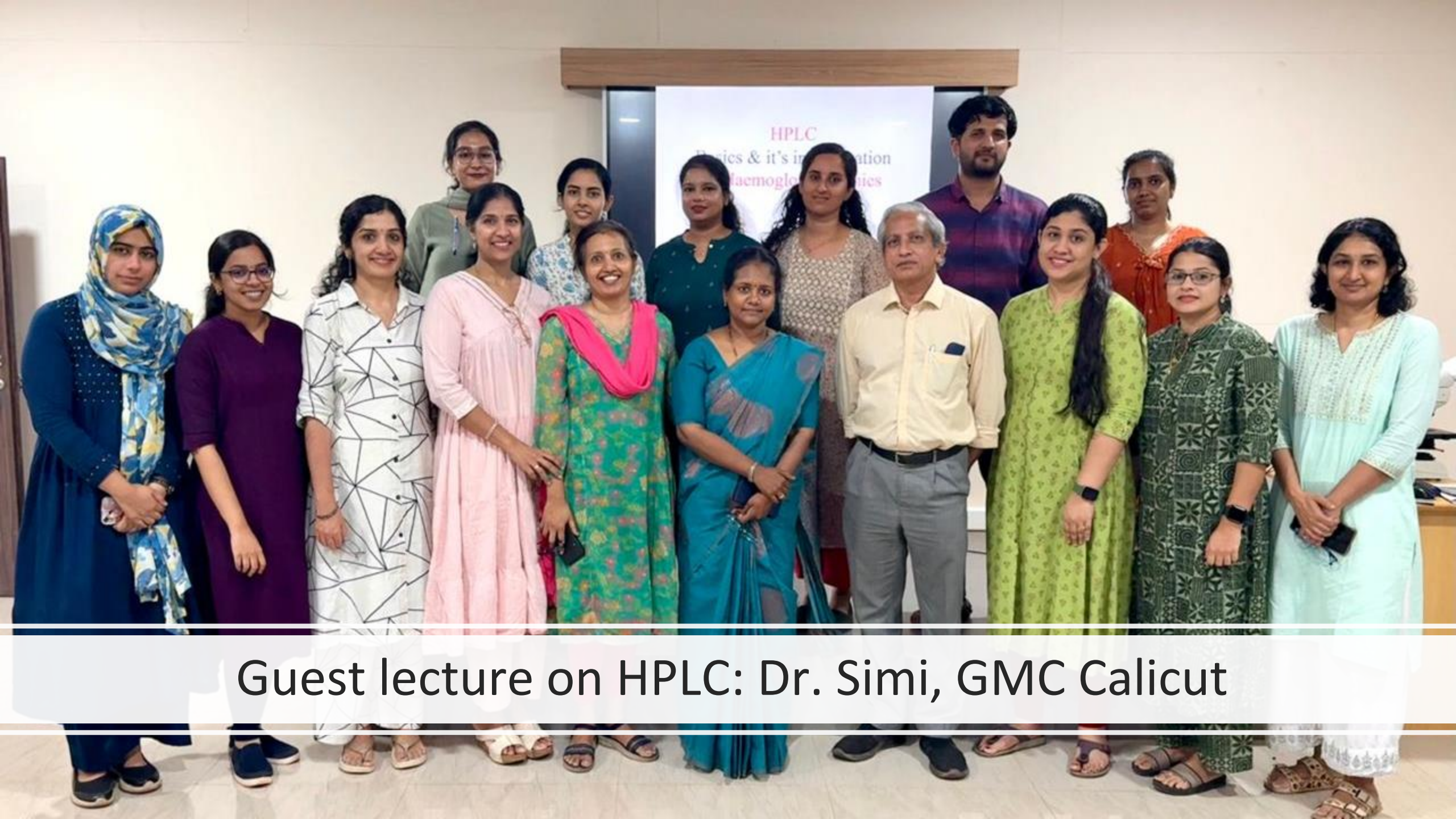




# Recent teaching sessions for postgraduates

Flow cytometry, Hematology masterclass, Slide seminar by external faculty - Dr. Fathima



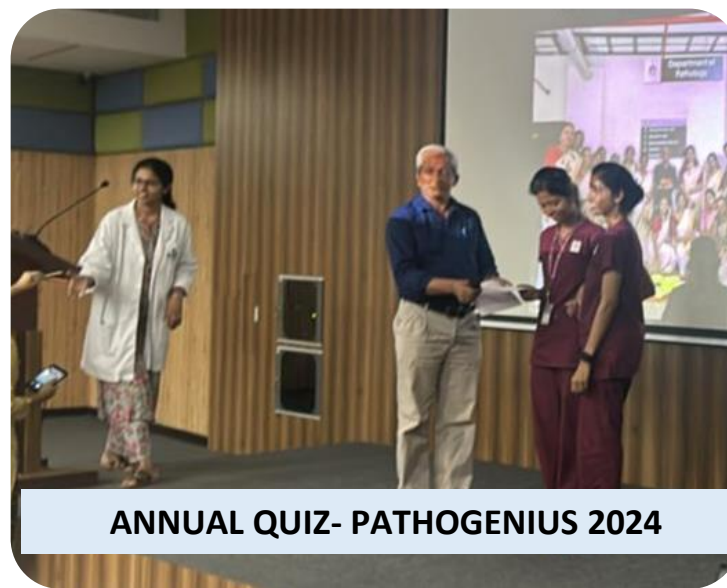


Guest lecture on HPLC: Dr. Simi, GMC Calicut





**AETCOM- POSTER MAKING COMPETITION**



**ANNUAL QUIZ- PATHOGENIUS 2024**



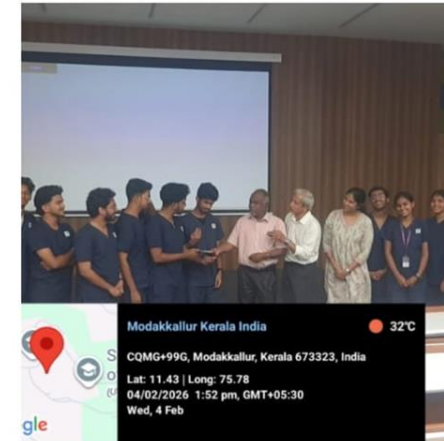
# Recent academic events conducted by the department

- Annual undergraduate quiz - '**PATHOGENIUS**'
- MEDNOVA 2023 - FNAC Workshop & escape room
- MEDNOVA 2025 - Cytology chronicles & Patho-hurdles
- Participation of top 10% students in **Prof. Ramachandran Memorial Gold Medal Examination**



# World Cancer Day '26

- Academic model-preparation
- Reels contest
- Breast cancer awareness session: Dr. Sumithlal, Oncosurgeon, MMCH & RC
- Museum specimen exhibition (IMA-MSN)

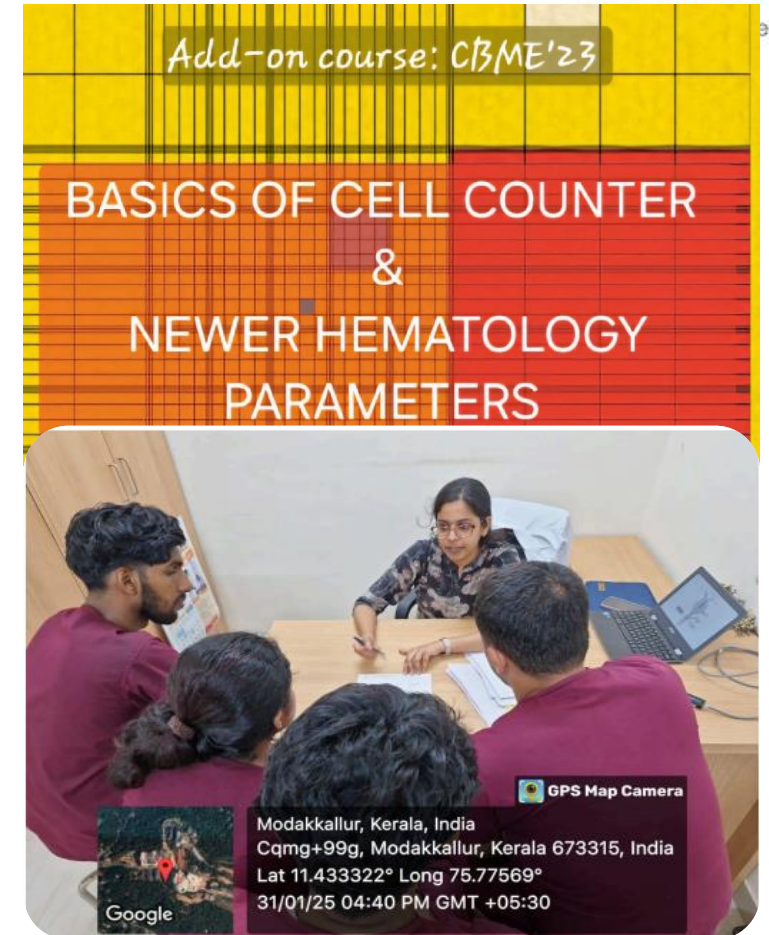




# Add-on courses and workshops for students



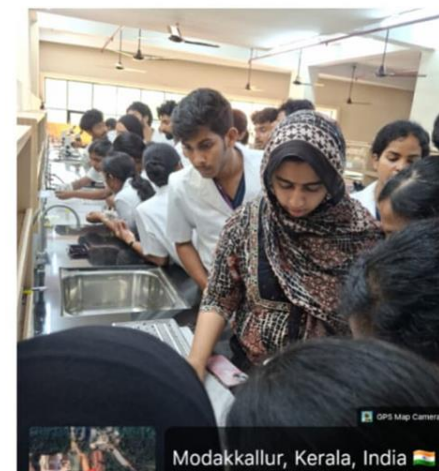
- Add on course on frozen section
- Add on course on Basics of cell counter and newer hematology parameters
- Workshop in FNAC technique



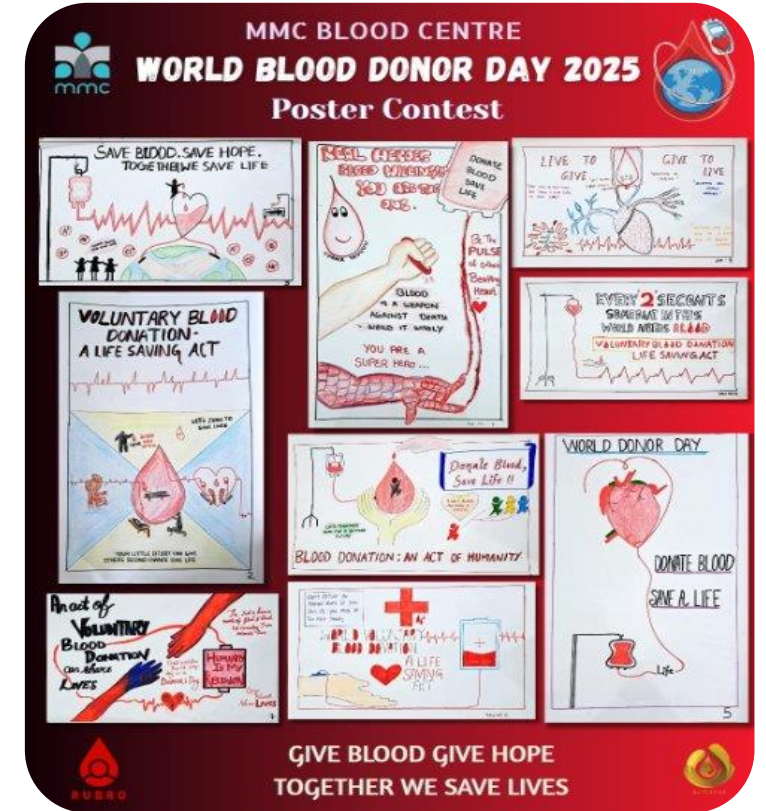
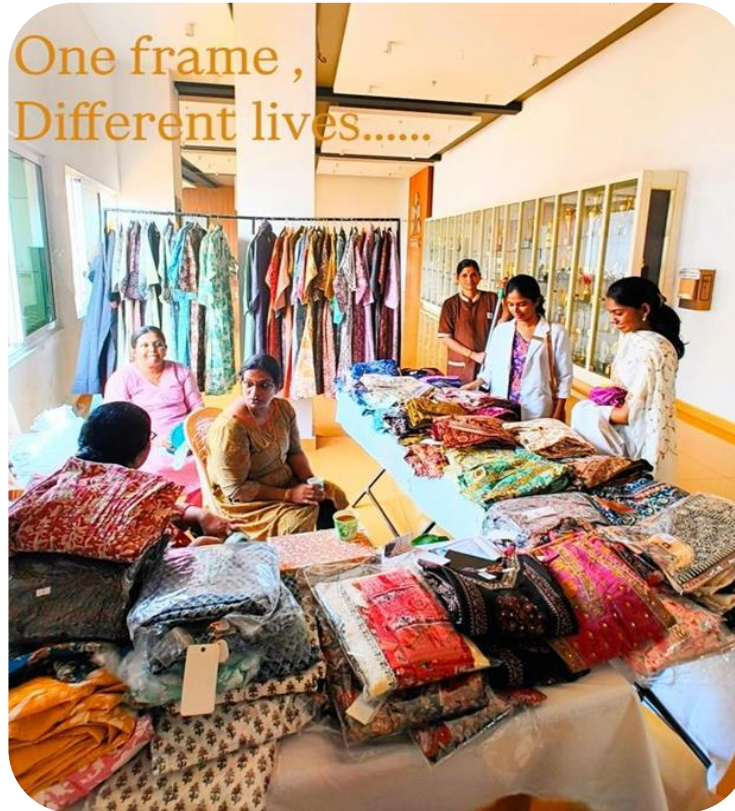
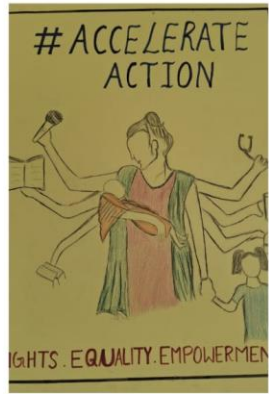
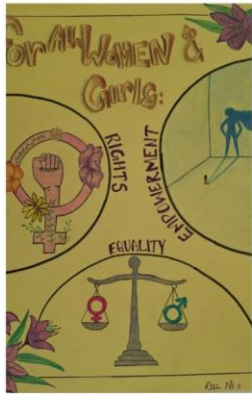


# Add-on course - CBME'24, 28/02/2026

A hands-on workshop on  
cervical smear cytology  
(*Pap smears*)







# Extracurricular competitions for students

Poster making competition on women's day, blood donor day, photography & reels competitions





# Recent department celebrations and get-togethers





# Future plans



- Upcoming CME: MMC WISDOMPATH SERIES 2.0 - Updates on bone and soft tissue pathology (October 2026)
- Preparation & publication of a textbook for allied health sciences
- Plan to organize IAPM State conference in the near potential future
- Grants for research (#2 being prepared)





