

## FELLOWSHIP IN FLOW CYTOMETRY

---

### ABOUT THE UNIVERSITY

Malla Reddy Vishwavidyapeeth is a reputed educational institution located in Hyderabad, Telangana, India. Recognized as a “Deemed to be University under Distinct (Existing) Category,” the university offers multidisciplinary programs across medical, dental, nursing, pharmaceutical sciences, and allied health sciences. The institution emphasizes academic excellence, clinical expertise, innovation, and global collaboration in advancing healthcare education.

---

### PROGRAM OVERVIEW

The Fellowship in Flow Cytometry is a one-year intensive program designed to train healthcare professionals in advanced cellular analysis and diagnostic applications using flow cytometry.

The program focuses on:

- Principles and instrumentation of flow cytometry
- Immunophenotyping of hematological malignancies
- Cell sorting and analysis
- Applications in immunology and oncology
- Quality control and standardization
- Data analysis and interpretation

The program integrates laboratory training, clinical exposure, and advanced analytical techniques to ensure comprehensive expertise in flow cytometry.

Department-of-Pathology\_compres...  
(Deemed to be University)

### PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Develop expertise in flow cytometry techniques and applications.
  2. Perform immunophenotyping and cellular analysis.
  3. Apply flow cytometry in diagnosis of hematological disorders.
  4. Interpret and analyze complex cytometric data.
  5. Ensure quality control and standardization.
  6. Integrate laboratory findings with clinical diagnosis.
  7. Conduct research in flow cytometry.
-

## PROGRAM OUTCOMES (POS)

1. **Technical Expertise:** Perform flow cytometry procedures accurately.
  2. **Diagnostic Skills:** Apply immunophenotyping in disease diagnosis.
  3. **Analytical Skills:** Interpret cytometric data effectively.
  4. **Laboratory Skills:** Maintain quality control and standardization.
  5. **Clinical Integration:** Correlate findings with clinical conditions.
  6. **Research Orientation:** Contribute to advancements in flow cytometry.
- 

## COURSE OUTCOMES (COS)

- CO1: Perform flow cytometry analysis.
  - CO2: Apply immunophenotyping techniques.
  - CO3: Interpret cytometric data.
  - CO4: Maintain quality control standards.
  - CO5: Integrate flow cytometry with clinical practice.
- 

## PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Demonstrate expertise in flow cytometry.
  2. Apply advanced analytical and diagnostic techniques.
  3. Integrate laboratory findings with clinical evaluation.
- 

## PROGRAM DETAILS

- Certificate Awarded by: Malla Reddy Vishwavidyapeeth
  - Program Duration: One-Year Fellowship (Fellowship to be University)
  - Mode of Delivery: Laboratory + Clinical + Theoretical Training
- 

## ELIGIBILITY CRITERIA

- Academic Qualification: MBBS with MD/DNB in Pathology / Microbiology / Immunology or equivalent
  - Professional Requirement: As per institutional norms
- 

## KEY FEATURES

- Advanced training in flow cytometry
  - Hands-on exposure to laboratory techniques
  - Training in immunophenotyping and data analysis
  - Focus on diagnostic accuracy and standardization
  - Evidence-based laboratory practice
- 

## LEARNING OUTCOMES

---

### KNOWLEDGE & UNDERSTANDING

- Comprehensive understanding of flow cytometry principles
- 

### COGNITIVE SKILLS

- Analytical decision-making in data interpretation
- 

### PRACTICAL & PROFESSIONAL SKILLS

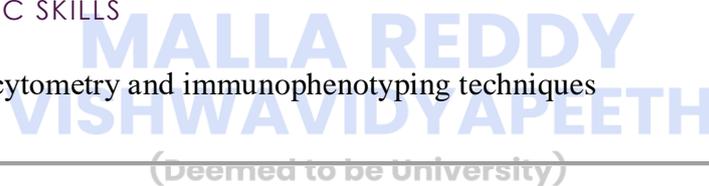
- Proficiency in flow cytometry procedures
  - Hands-on experience in diagnostic labs
- 

### TRANSFERABLE SKILLS

- Data interpretation and reporting
- 

### SUBJECT-SPECIFIC SKILLS

- Advanced flow cytometry and immunophenotyping techniques
- 



## CURRICULUM MODULES – THEORY

---

### SEMESTER 1: FUNDAMENTALS OF FLOW CYTOMETRY

- Basics of Flow Cytometry
  - Instrumentation & Principles
  - Immunophenotyping
  - Laboratory Techniques
  - Quality Control
  - Clinical Rotations
- 

### SEMESTER 2: ADVANCED FLOW CYTOMETRY APPLICATIONS

- Hematological Malignancies
  - Oncology Applications
  - Data Analysis
  - Standardization
  - Case Studies
  - Research Project
- 

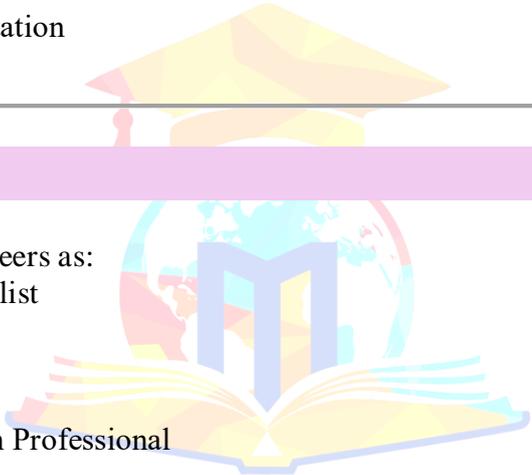
#### PRACTICAL COURSEWORK

- Flow cytometry analysis
  - Immunophenotyping
  - Data interpretation
  - Quality control procedures
  - Case discussions
  - Research and documentation
- 

#### CAREER OUTCOMES

Graduates can pursue careers as:

- Flow Cytometry Specialist
- Diagnostic Pathologist
- Laboratory Scientist
- Clinical Researcher
- Academic and Research Professional



**MALLA REDDY  
VISHWAVIDYAPEETH**  
(Deemed to be University)