

## FELLOWSHIP IN PAEDIATRIC GENETICS

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### 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.

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### PROGRAM OVERVIEW

The Fellowship in Paediatric Genetics is a one-year advanced program designed to train healthcare professionals in the diagnosis and management of genetic disorders in infants and children.

The program focuses on:

- Genetic and chromosomal disorders
- Inherited metabolic diseases
- Dysmorphism and congenital anomalies
- Genetic counselling and risk assessment
- Molecular diagnostics and genomic testing
- Prenatal and neonatal screening

The program integrates clinical training, laboratory exposure, and advanced genetic diagnostic techniques to ensure comprehensive expertise in paediatric genetics.

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(Deemed to be University)

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### PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Develop expertise in paediatric genetics.
  2. Diagnose genetic and inherited disorders.
  3. Interpret molecular and genomic investigations.
  4. Provide genetic counselling and risk assessment.
  5. Manage congenital and metabolic conditions.
  6. Integrate research into genetic clinical practice.
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## PROGRAM OUTCOMES (POS)

1. **Clinical Expertise:** Manage paediatric genetic disorders.
  2. **Diagnostic Skills:** Interpret genetic and molecular tests.
  3. **Counseling Skills:** Provide genetic counselling.
  4. **Preventive Care:** Implement screening and early diagnosis.
  5. **Multidisciplinary Care:** Coordinate with clinical teams.
  6. **Research Orientation:** Contribute to genetic research.
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## COURSE OUTCOMES (COS)

- CO1: Diagnose genetic and chromosomal disorders.
  - CO2: Interpret molecular and genomic investigations.
  - CO3: Provide genetic counselling.
  - CO4: Manage metabolic and congenital conditions.
  - CO5: Integrate clinical and genetic practices.
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## PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Demonstrate expertise in paediatric genetics.
  2. Apply advanced genetic diagnostic techniques.
  3. Integrate clinical practice with genomic medicine.
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## PROGRAM DETAILS

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

- Academic Qualification: MD/DNB Paediatrics or equivalent
  - Professional Requirement: As per institutional norms
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## KEY FEATURES

- Advanced training in paediatric genetics
- Hands-on exposure to genetic testing and counselling

- Training in molecular and genomic diagnostics
  - Focus on early diagnosis and prevention
  - Evidence-based genetic practice
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## LEARNING OUTCOMES

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### KNOWLEDGE & UNDERSTANDING

- Comprehensive understanding of paediatric genetic disorders
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### COGNITIVE SKILLS

- Clinical decision-making in genetic diagnosis
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### PRACTICAL & PROFESSIONAL SKILLS

- Proficiency in genetic evaluation and counselling
  - Hands-on experience in clinical and lab settings
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### TRANSFERABLE SKILLS

- Patient and family counselling
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### SUBJECT-SPECIFIC SKILLS

- Advanced paediatric genetics and genomic medicine techniques
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## CURRICULUM MODULES – THEORY

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### SEMESTER 1: FUNDAMENTALS OF PAEDIATRIC GENETICS

- Basics of Genetics
  - Chromosomal Disorders
  - Metabolic Diseases
  - Congenital Anomalies
  - Genetic Counselling
  - Clinical Rotations
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### SEMESTER 2: ADVANCED PAEDIATRIC GENETICS

- Molecular Diagnostics
- Genomic Medicine
- Prenatal Screening

- Neonatal Screening
  - Case Studies
  - Research Project
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#### PRACTICAL COURSEWORK

- Genetic evaluation
  - Laboratory investigations
  - Counselling sessions
  - Case discussions
  - Documentation and reporting
  - Research work
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#### CAREER OUTCOMES

Graduates can pursue careers as:

- Paediatric Geneticist
- Clinical Genetic Specialist
- Genetic Counsellor
- Clinical Researcher
- Academic and Teaching Professional

