

FELLOWSHIP IN CLINICAL EMBRYOLOGY & ART

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 Clinical Embryology & ART is a specialized program designed to develop expertise in embryology, laboratory techniques, and assisted reproductive technologies.

The program focuses on:

- Gamete biology and handling techniques
- Fertilization procedures (IVF, ICSI)
- Embryo culture, grading, and transfer support
- Cryopreservation of gametes and embryos
- ART laboratory setup and quality control
- Advanced reproductive technologies and innovations

The program integrates **laboratory training, theoretical knowledge, and hands-on exposure**, ensuring competency in clinical embryology and ART practices.

MALLA REDDY
VISHWAVIDYAPEETH
(Deemed to be University)

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Graduates will be able to:

1. Perform embryology laboratory procedures with precision.
 2. Apply ART techniques such as IVF and ICSI effectively.
 3. Maintain quality standards in ART laboratories.
 4. Deliver ethical and evidence-based embryology practices.
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PROGRAM OUTCOMES (POS)

1. **Laboratory Expertise:** Handle gametes and embryos using standardized protocols.
2. **ART Proficiency:** Perform IVF, ICSI, and embryo culture techniques.

3. **Cryopreservation Skills:** Apply freezing and thawing techniques for reproductive cells.
 4. **Quality Assurance:** Maintain laboratory quality control and safety standards.
 5. **Technical Precision:** Ensure accuracy in laboratory procedures and documentation.
 6. **Ethical Practice:** Follow ethical and regulatory guidelines in ART.
 7. **Research & Innovation:** Contribute to advancements in reproductive technologies.
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COURSE OUTCOMES (COS)

- **CO1:** Understand embryology and reproductive biology principles.
 - **CO2:** Perform IVF, ICSI, and embryo culture procedures.
 - **CO3:** Apply cryopreservation techniques effectively.
 - **CO4:** Maintain laboratory quality and safety standards.
 - **CO5:** Document and analyze ART laboratory processes.
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PROGRAM-SPECIFIC OUTCOMES (PSOS)

1. Demonstrate expertise in embryology laboratory techniques.
 2. Apply ART procedures with precision and accuracy.
 3. Ensure quality-controlled and ethical embryology practices.
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PROGRAM DETAILS

- **Certificate Awarded by:** Malla Reddy Vishwavidyapeeth
 - **Program Duration:** One-Year Fellowship
 - **Mode of Delivery:** Laboratory Training + Theoretical Learning + Hands-on Practice
(Deemed to be University)
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ELIGIBILITY CRITERIA

- **Academic Qualification:** MBBS / BDS / BSc / MSc in Life Sciences / Biotechnology / Related Fields
 - **Professional Requirement:** As per institutional guidelines
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KEY FEATURES

- Advanced training in clinical embryology and ART
- Hands-on exposure to IVF, ICSI, and embryo culture
- Training in cryopreservation techniques
- Focus on laboratory precision and quality control

- Exposure to real-time ART procedures
 - Strong emphasis on ethical and regulatory practices
 - Industry-relevant, skill-based training
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LEARNING OUTCOMES

KNOWLEDGE & UNDERSTANDING

- Comprehensive understanding of embryology and assisted reproduction.
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COGNITIVE SKILLS

- Analytical and decision-making skills in laboratory procedures.
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PRACTICAL & PROFESSIONAL SKILLS

- Proficiency in ART laboratory techniques and procedures.
 - Hands-on experience in embryology labs.
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TRANSFERABLE SKILLS

- Laboratory documentation and reporting skills.
 - Teamwork and coordination in clinical environments.
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SUBJECT-SPECIFIC SKILLS

- Advanced ART techniques and embryology applications.
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CURRICULUM MODULES – THEORY

- Basics of Embryology and Reproductive Biology
 - Gamete Handling and Preparation
 - IVF and ICSI Techniques
 - Embryo Culture and Grading
 - Cryopreservation (Sperm, Oocyte, Embryo)
 - ART Laboratory Setup and Quality Control
 - Ethical and Legal Aspects of ART
 - Advanced Embryology Techniques
 - Reproductive Genetics
 - Innovations in ART
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PRACTICAL COURSEWORK

- Hands-on training in embryology laboratories
 - Sperm preparation and semen analysis
 - Oocyte handling and fertilization techniques (IVF/ICSI)
 - Embryo culture, grading, and transfer assistance
 - Cryopreservation procedures and thawing techniques
 - Laboratory quality control practices
 - Case documentation and laboratory reporting
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CAREER OUTCOMES

Graduates of the Fellowship in Clinical Embryology & ART can pursue careers as:

- Clinical Embryologist
- ART / IVF Laboratory Specialist
- Fertility Center Laboratory Expert
- Reproductive Technology Specialist
- Clinical Practitioner in Fertility Clinics
- Academic and Research Roles in Embryology

