DIPLOMA

IN CLINICAL EMBRYOLOGY &

ASSISTED REPRODUCTIVE TECHNOLOGY (ART)

2021 - 2022



(REVA University in collaboration with MOMSOON Academy)





EMBRYOLOGY AS A CAREER

With the increase in the incidence of infertility around the globe, there is a huge dearth of embryologists thus making it one of the highly sought after career option for science and medical graduates and post graduates.

Due to the high percentage of people who are experiencing infertility issues, it is expected that embryology is a field that is going to continue to see career growth in the future.

The skills involved in embryology are complex, delicate, and require adequate hands-on practice. The know-how of an expert embryologist is crucial for the

success of IVF treatments and the proficiency of an embryologist contributes a great deal for the success of infertility treatment.

Thus the "Diploma in Clinical Embryology & Assisted Reproductive Technology (PGD-CEART)" by REVA University in collaboration with MOMSOON Academy is designed keeping in mind the subject specific academic needs and industry requirements, with the help of subject experts.

At the end of the course, the students will be equipped to work competently in human IVF services by providing them with essential theoretical and practical knowledge in Human Embryology.

To make this course more holistic, stress is also given to the existing guidelines, regulations and protocols that enable the candidates to perform embryology procedure ethically as well as accurately.



DIPLOMA IN CLINICAL EMBRYOLOGY & ASSISTED REPRODUCTIVE TECHNOLOGY (ART)

The "Diploma in Clinical Embryology & Assisted Reproductive Technology (ART)" is a **6 months duration program**.

ELIGIBILITY :

Graduates in Biological Sciences / Life Sciences (**B.Sc./B.Tech/BE**), Veterinary Sciences (**BVSc**), Medical Sciences (**MBBS**), Dental Sciences (**BDS**), Ayurveda (**BAMS**), Homeopathy (**BHMS**) and Unani Medicine (**BUMS**).

INCLUDES:

•Online delivery of learning content (1 month)

·Classroom learning (1 month)

Demonstration & Hands-on practical training (2 month)

·Project (2 month)

COURSE HIGHLIGHTS:

Plenty of mice oocytes and injection pipettes will be provided to ensure that candidates
become proficient with the microinjection technique

•Expose to the majorly used micromanipulator system - Narishige

•Well equipped lab exclusively for **hands-on practice**

 $\cdot \textbf{Experienced} \ faculty$



COURSE CURRICULUM

PART A: SEMEN ANALYSIS & SEMEN PREPARATION FOR ART PROCEDURES

Semen analysis is useful in both clinical and research settings, for investigating male fertility status as well as monitoring spermatogenesis during and following male fertility regulation.

All aspects of semen collection and analysis must be done by properly standardized procedures if the results are to provide valid, useful information.

The tests described in this course are accepted procedures that constitute the essential steps in semen evaluation.

Semen preparation - the separation of human spermatozoa from seminal plasma to yield a final preparation containing a high percentage of morphologically normal and motile cells, free from debris, non-germ cells and dead spermatozoa, is important for clinical practice.

The methods and principles of sperm preparation are taught in this course.

PART B: CRYOPRESERVATION & VITRIFICATION

Both sperm and embryo cryopreservation have become routine procedures in human assisted reproduction and oocyte cryopreservation is being introduced into clinical practice and is getting more and more widely used.

This course provides **cryopreservation and vitrification methods and techniques that indicate better survival rates**.



COURSE CURRICULUM

PART C: IVF (IN-VITRO FERTILIZATION)

IVF involves screening of gametes, fertilization and transfer of resultant embryos into the uterus or freezing for future use.

This course provides through knowledge of the **processes involved which is crucial for an embryologist**.

PART D: ICSI (INTRA-CYTOPLASMIC SPERM INJECTION)

ICSI is technically demanding and there is substantial potential for damage to the

egg due to poor micro-injection technique, which can cause it to degenerate.

Despite the intricate technical demands of ICSI, it is nevertheless still just a technique.

Indeed, it is now considered routine, and fully trained clinical embryologists are usually expected to have attained this skill.

This course provides a clear guide to the essentials of the ICSI technique along with suggestions as to how best to troubleshoot the most commonly encountered problems and aims at imparting the best practices of ICSI to achieve high fertilization rates.

The equipment needed by an IVF laboratory to ensure good ICSI procedure and the technical aspects of the ICSI procedure are discussed and demonstrated.

Plenty of mouse oocytes and injection pipettes will be provided for hands-on practice.



CALENDAR 2021 - 2022

Schedule	August 2021 - July 2022
Online learning - <mark>1 months</mark>	August 2021
Classroom learning - 1 months	September 2021
Practical training - 2 months	October 2021 - November 2021
Project - <mark>2 month</mark>	December 2021 - January 2022



COURSE FEE: Rs. 2,25,000/-

CONTACT US :

Call +91 98864 47093 MOMSOON Academy www.momsoonacademy.com info@momsoonacademy.com