



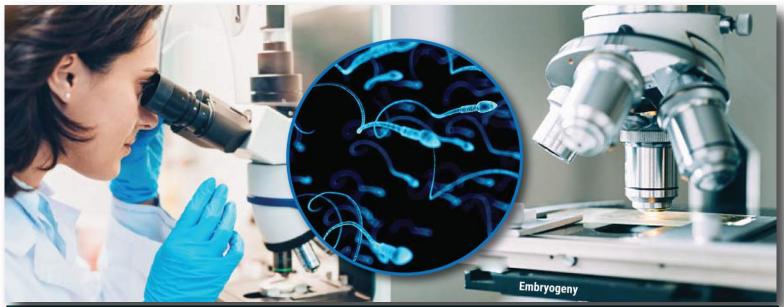
## **EMBRYGGENY**

HANDS-ON | HYBRID | ONLINE

**CURATED COURSES IN EMBRYOLOGY AND IVF BY EXPERTS** 







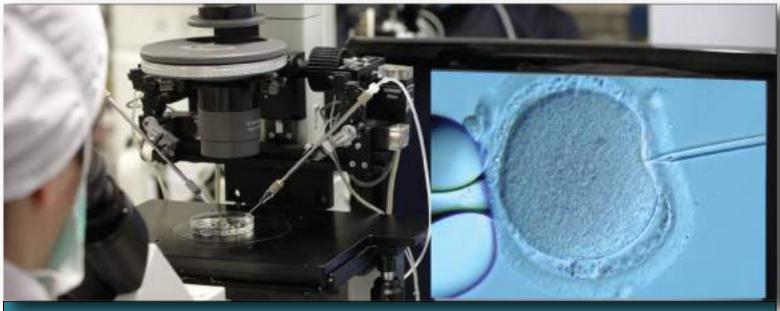
	Embryogeny
ANDROLOGY LAB	TECHNICIAN COURSE - SEMEN ANALYSIS, PROCESSING & CRYOPRESERVATION
Orientation	Orientation of Andrology Lab Introduction to Andrology Lab Equipment , Instruments & Microscopes Overview of Disposables, consumables, Stains & Reagents
Semen Analysis & Sperm Function Test	Overview of WHO Manual 2020 6th Edition  Overview of Semen Analysis (Macroscopic & Microscopic Assessment)  Macroscopic Examination - Color, Odor, pH and Volume measurement  Microscopic Examination - Concentration, Motility and Morphology  Assessment of Count and Concentration using Counting Chamber  Assessment of Vitality using Eosin  Assessment of Sperm Motility  Assessment of Sperm Morphology (Kruger's Criteria)  Preparing Morhology Slides  Reporting of Semen Analysis as per WHO 6th Edition  Understanding Reference Range for Final Impression in the Report  Optional Tests on Semen  HOS Test - Hypo Osmotic Swelling Test for assessment of sperm vitality  Fructose Test for Azoospermia  Tips and Tricks for handling tricky semen samples  Handling highly viscouos semen sample and reporting  Handling Azoospermic and Cryptozoospermic samples  Handling 100% immotile semen sample and reporting  Importance of Round Cell assessment and Reporting
Semen Sample Preparation Techniques	Various Methods (Simple Wash, Swim Up and Density Gradient) Simple Wash Technique - How & When Semen Sample preparation using Swim Up Method - How & When Semen Sample preparation using Double Density Gradient (How & When) Tips for creating stable interface Tips for best result of motile fraction in pellet Preparing TESA/PESA samples Reporting - IUI Sample Report (Demonstration & Practice) Do's and Don't while preparing sample for IVF/ICSI Handling infectious sample (HIV, HbsAg etc)
Semen Cryopreservatio n and Thawing	Principles of Slow Freezing and Thawing of Semen Semen Freezing for normal sample - Procedure Semen freezing for abnormal semen parameters - Procedure Thawing Frozen Semen Sample Methods for preparing semen sample after Thawing
Quality Assurance	Handling Storage Cans. Record Keeping and Cryosafety Cleaning of Andrology Lab. Daily Temperature Checks Infectious sample storage and record keeping QA QC of equippments



BASIC EMBRYOLOGY - COURSE CONTENT ( FROM IVF TO ET )		
Orientation	Orientation of IVF Lab Equipments, Disposables, Consumables etc	
Ovum Pick Up	Folliculogenesis , Oogenesis and Spermatogenesis - Lecture	
	IVF Stimulation Protocols - Lecture	
	Embryo Culture System - Lecture	
	OPU to Embryo Transfer - Time Line and Touch Points	
	Evening Before OPU preparation - Plating/Media Equillibration	
	Preparation before OPU	
	Screening for Oocytes - Demonstration and Hands On	
	OCC Grading and Best practices	
	IVF Insemination	
	How to prepare semen sample for IVF Insemination	
	Calculating Volume of inseminate	
	Types of IVF insemination protocols (Long Vs Short insemination)	
	Partial denudation after insemination	
Insemination	Assessment of Fertilization for IVF - Protocol.	
IVF and ICSI	ICSI - Demonstration	
	Denudation (Tips and Tricks) in Theory. Preparing Plate for Denudation. Demonstration	
	ICSI Plating and Alignment Demonstration	
	ICSI Machine brief Orientation	
	Sperm immobilization technique - Demonstration	
	ICSI Process for Fertilization - Demonstration	
	2PN Check. Fertilization check, Cleavage Check.	
Embryo	Assessment of Embryo on Day 3 and Day 5	
Assessment	Stage wise Embryo Grading	
	Record Keeping of Case - Embryology Sheet	
	Preparing Embryo Transfer Dish.	
Embryo	Preparing ET Dish with Embryo Glue and Likes	
Transfer	ET Procedure - Demonstration and Mock ET Practice	
	Handling difficult ET's - Tips and Tricks	
	Embryo and Oocyte Freezing - Principles	
	Preparation and Plating for Freezing	
Embryo/ Oocyte Freezing	Live demonstration of Embryo Freezing	
	Maintaining Embryo Cryo Storage - Do's and Don'ts	
	Record keeping, Consents and handling Embryo Straws and Cryostorage	
	Practice Vitrification of discarded Embryos/Oocytes	
	Embryo and Oocyte Warming - Principles	
Embryo/	Preparation and Plating for Warming	
Oocyte	Live demonstration of Embryo Warming.	
Warming	Practice warming on discarded embryos	
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Surgical Sperm	TESA / PESA sample teasing and preparation - Theory Warming of Previously stored TESA Sample and locating live sperm - Demonstration	
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	QA - Daily, Weekly and Monthly activities in IVF Lab	
_	Cleaning of IVF Lab	
Quality	Maintenance and cleaning of Incubators (Contracon for Box Incubator)	
Assurance of IVF Lab	Maintenance and cleaning of Workbench Filters	
	Daily Temperature monitoring  OA OC of Lab equippments - Microscopes Micromanipulator Heating surfaces	

QA QC of Lab equippments - Microscopes , Micromanipulator , Heating surfaces

Inventory check and management



MICROMANIPULATION OF GAMETES - MASTERING ICSI		
Preparing for ICSI	Preparation for ICSI Preparing Oocyte for ICSI - Denudation (Demonstration & Hands On) Preparing Sperm for ICSI ICSI Plating Demonstration & Hands On on Different Plating Styles	
ICSI Machine Orientation	Parts of ICSI Machine, Controller, Syringes, Inverted Microscope Holding and Injection Pipette - Introduction to different Makes Alignment of Microtools - Demonstration & Hands On Grip Head Replacement, Oil refilling in Oil based System	
Sperm Immobilization & Assessment	Sperm Immobilization and Assessment Real time assessment of Motile Sperm Morphology How to handle samples with very low sperm concentration How to handle TESA, PESA sperm samples	
Injection Process	ICSI - Demonstration and Hands On Oocyte Morphology assessment and Injection basics Technique for oocyte Holding, Breaking Oolema and Injection ICSI Tips and Tricks - Do's and Don'ts	
Hands On Injection & Immobilization	Practice on Unfertilized Oocytes ( 3 to 4 oocytes) Practice on Fresh Oocytes (upto 6 M2) Practice on Sperm Immobilization	
Tips & Tricks of Micromanipulation & Special Cases	Assessment of Fertilization post ICSI Rescue ICSI - Should You ? TESA - Dealing with PESA and TESA Sperms - Tips and Tricks IVM - ICSI after maturation of GV and M1 - Timeline and Culture	
Record Keeping &	Record Keeping - Embryology Sheet Entries	

What to record and how to record Oocyte Morphology

Documentation

