



EMBRYGGENY

HANDS-ON | HYBRID | ONLINE

CURATED COURSES IN EMBRYOLOGY AND IVF BY EXPERTS



🜐 www.embryologyivftraining.com 🔊 9644444066





	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	Semen Sample Preparation - Theory 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



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BASIC EMBRYC	DLOGY - COURSE CONTENT (FROM IVF TO ET)
Orientation	Orientation of IVF Lab Equipments, Disposables, Consumables etc Folliculogenesis, Oogenesis and Spermatogenesis - Lecture IVF Stimulation Protocols - Lecture Embryo Culture System - Lecture
Ovum Pick Up	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
Insemination IVF and ICSI	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 Assessment of Fertilization for IVF - Protocol. 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
Embryo Assessment	2PN Check. Fertilization check, Cleavage Check. Assessment of Embryo on Day 3 and Day 5 Stage wise Embryo Grading Record Keeping of Case - Embryology Sheet
Embryo Transfer	Preparing Embryo Transfer Dish. Preparing ET Dish with Embryo Glue and Likes ET Procedure - Demonstration and Mock ET Practice Handling difficult ET's - Tips and Tricks
Embryo/ Oocyte Freezing	Embryo and Oocyte Freezing - Principles Preparation and Plating for 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/ Oocyte Warming	Embryo and Oocyte Warming - Principles Preparation and Plating for Warming Live demonstration of Embryo Warming. Practice warming on discarded embryos
Surgical Sperm	TESA / PESA sample teasing and preparation - Theory Warming of Previously stored TESA Sample and locating live sperm - Demonstration
Quality Assurance of IVF Lab	QA - Daily, Weekly and Monthly activities in IVF Lab Cleaning of IVF Lab Maintenance and cleaning of Incubators (Contracon for Box Incubator) Maintenance and cleaning of Workbench Filters Daily Temperature monitoring QA QC of Lab equippments - Microscopes , Micromanipulator , Heating surfaces Inventory check and management



MICROMANIPULATION	N 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 & Documentation	Record Keeping - Embryology Sheet Entries What to record and how to record Oocyte Morphology



Theory of
Cryopreservation

Cryopreservation in Theory

Histroy of Cryopreservation of Gametes.

Challenges in cryopreserving cells.

How cryopreservation evolved over the years

Types of Cryoprotectants and their properties

Principle of Vitrification

Cryostorage Basics

Equipment, tools and media needed for Cryopreservation

Types of Cryostorage Tanks

Types of Cryostorage Media - Pro's and Con's

Types of Cryo device - Pro's and Con's

Practice locating Goblets from Cryo Canister

Vitrification of Embryos (Cleavage and Blastocyst)

Vitrification of Embryos

The Vitrification Protocol for Cleavage state Embryos

Vitrification Protocol for Blastocysts

Tips of best survival rate

Hands-on Practice of Vitrification on discarded embryos

To Do's and What Not To Do's during Vitrification

Vitrification of Oocytes

Oocyte Vitrification Basics

Timeline for best survival and fertilization rates

Challenges faced in Oocyte Vitrification. How many Oocytes per straw?

Basics of Oocyte Vitrification Protocol for different Vitrification Media

Hands On Oocyte Vitrification

Cryogovernance and ART Rules

Cryogovernance & The ART Rules and Law

Know the ART Rules related to long term cryostorage of gametes

How to increase storage capacity for storing maximum gametes safely

Tools for Cryo governance

Consent and Documentation

Record Keeping & Documentation

Record Keeping - Embryology Sheet Entries and Cryostorage Sheets What information to record during gamete storage.

Fail proof mechanism of maintaining and locating Patient Gametes



^{*}Please send scanned copy of Degree certificate (Bachelors/Masters) and Aadhar Id (India) or Passport Number (Internatio