Training Lab
Hands-on Training & Education 2017
Training Programs: delivering improved performance

Scientific training courses allowing you to optimize your performance, learn new skills and network globally with international peers.

ORIGIO has been providing hands-on training and education since March 2011. Situated at its corporate headquarters in Måløv, near Copenhagen, Denmark, the dedicated training laboratory is fully equipped allowing demonstrations of, and hands-on training in, a comprehensive range of Assisted Reproductive Technologies. Rather than promoting its own products, ORIGIO focuses on providing evidence-based training by skilled, experienced embryologists including invited experts in specific topics such as vitrification, sperm selection, and embryo biopsy.

ORIGIO’s existing courses are always in high demand with embryologists from across the globe requesting training both in general embryology and in specific ART procedures. Feedback from participating embryologists is extremely positive with courses regarded as ‘highly professional’, ‘inspirational’, and having a ‘fantastic hands-on lab’. Participants also appreciate the opportunity to network with peers from other countries. A range of workshops has been developed aimed at more senior embryologists, tackling topics such as Culture Media, Laboratory Design & Start Up, and Quality Control.

ORIGIO recognizes the need for local training as well and offers courses in Mumbai (India), Yokohama City (Japan), and Saint Petersburg (Russia).

Our lecturers are assisted by external, local lecturers in order to create a rich, lively program tailored, wherever possible, to local requirements.

In addition, ORIGIO embryologists provide support for local seminars and workshops.

The ORIGIO team of experienced embryologists also assists customers setting up new clinics (turn-key projects), laboratory design, and clinic audits aimed at optimizing lab performance.

Training courses available in 2017

• Core Embryology
• Introduction to ICSI
• Vitrification
• Sperm Selection for ICSI
• Biopsy Techniques
• Culture Media: Design, Testing and Use
• Design, build and start up your ART laboratory

To register, ask for late availability or receive the 2017 course schedule for training in India, Japan or Russia, contact your local ORIGIO Account Manager or mail us at traininglabdk@origio.com

For the full schedule visit origio.com
Core Embryology

Course objectives

Participants will critically appraise key processes in the embryology laboratory, examining the evidence base and evaluating the various systems used. The course covers the principal procedures from oocyte collection and sperm preparation through to embryo transfer, and will look at IVF insemination, culture techniques, and embryo selection. In addition, data management for auditing and surveillance of laboratory performance will be highlighted. Participants will have the opportunity to see how media are produced during a factory tour. The emphasis will be on group participation so that delegates can pick up tips, optimizing lab performance.

Please note:

- This course does NOT include cryopreservation, ICSI or other micromanipulation techniques; see other course descriptions for training available in these techniques.
- The course does NOT involve any observation of clinical work or use of human eggs/embryos handling during egg collection, insemination and embryo transfer.

Program

- Semen analysis & preparation
- Egg collection and handling
- Fertilization & culture
- Embryo assessment
- Embryo transfer
- Audit & troubleshooting

Course design

- 2-day course
- Lectures, demonstrations and hands-on practical sessions
- 6 participants
- This course is targeted at trainees who have some clinical experience and wish to have more theoretical and hands-on training

Minimum experience

Working as a clinical embryologist.

Fee

Course fee is EUR 525. Transportation and accommodation are not included. Local transportation between hotels and the course venue will be arranged. Lunches and refreshments will be provided during the course.

Introduction to ICSI

Course objectives

Participants will receive a step-by-step guide to ICSI, with a critical appraisal of the technique’s efficacy. It will include an examination of the evidence for patient selection and indications for ICSI. The technical aspects of sperm preparation, including sperm retrieved from post-orgasmic urine or retrieved surgically from the epididymis or testis, will be discussed along with the preparation of oocytes prior to injection. The set-up and optimization of the ICSI equipment and procedure will be discussed, demonstrated and practiced.

Please note: The course does NOT involve any observation of clinical work or use of human eggs/embryos. Hamster oocytes and human sperm will be used in practical sessions.

Program

- Indications for ICSI
- Sperm preparation & handling
- ICSI equipment set-up, including choice of microtools
- ICSI technique

Course design

- 2-day course
- Lectures, demonstrations and hands-on practical sessions
- 6 participants
- This course is targeted towards embryologists with little or no ICSI experience wishing to learn the basics of the technique

Minimum experience

Working as a clinical embryologist, each delegate should have some general embryology experience. Though no experience of ICSI is needed, it is advisable for participants to do background reading and ideally some in-house basic training on ICSI equipment set-up so that they can maximize the benefit of time spent at the course. Please note that all practical sessions will use Research Instruments Integra 3™ micromanipulators.

Fee

Course fee is EUR 350. Transportation and accommodation are not included. Local transportation between hotels and the course venue will be arranged. Lunches and refreshments will be provided during the course.
Sperm Selection for ICSI

Course objectives
Participants will learn approaches for semen assessment and preparation, preparation of eggs for ICSI, optimization of the ICSI procedure and use of sperm selection techniques based on hyaluronan binding (SpermSlow™ and PICS® Dish). The emphasis will be on group participation so that delegates can pick up tips on how to optimize lab performance.

Please note: That the course does NOT involve any observation of clinical work or use of human eggs/embryos.

Program
• Indications for ICSI
• Sperm preparation & handling
• ICSI
• Sperm evaluation
• HBA®, PICS® & SpermSlow

Course design
• 2-day course
• Lectures, demonstrations and hands-on practical sessions
• 6 participants
• This course is targeted towards embryologists already performing ICSI, who wish to hone their skills including use of sperm selection techniques

Minimum experience
Working as a clinical embryologist, each delegate should have some experience with ICSI.

Please note: That this course is NOT aimed at embryologists wishing to receive basic training in ICSI. For this, please see our Introduction to ICSI course.

Fee
Course fee is EUR 350. Transportation and accommodation are not included. Local transportation between hotels and the course venue will be arranged. Lunches and refreshments will be provided during the course.

Vitrification

Course objectives
Participants will learn the principles of cryobiology, including vitrification, and examine clinical data from the scientific literature. The course also includes demonstrations of the vitrification cooling and warming procedures followed by the opportunity for some hands-on work using SAGE™ and ORIGIO systems including DMSO and DMSO-free systems.

Please note: The course does NOT involve any observation of clinical work or use/handling of human eggs/embryos.

Program
• Principles of cryobiology including a comparison of slow freezing and vitrification
• Vitrification systems
• Optimizing cooling and warming protocols

Course design
• 1-day course
• Lectures, demonstrations and hands-on practical sessions
• Up to 6 participants
• This course is targeted towards embryologists wishing to introduce vitrification as a new service or those seeking to optimize results

Minimum experience
Working as a clinical embryologist.

Fee
Course fee is EUR 175. Transportation and accommodation are not included. Local transportation will be arranged. Lunch and refreshments will be provided during the course.
Biopsy Techniques

Course objectives
The workshop is intended to provide participants with core knowledge and introductory practical skills under the supervision of an experienced practitioner. It provides a comprehensive overview of biopsy techniques for different developmental stages (polar body, cleavage stage and trophectoderm biopsy) and genetic analysis methods for each biopsy technique. Choice of pipettes, media and possible uses of the biopsied material will be discussed. Participants will learn to prepare the biopsy setting, perform assisted hatching by the use of laser, biopsy and retrieve polar bodies and cells.

Hands-on sessions will allow participants to practice each type of biopsy technique using hamster oocytes, and mouse embryos and blastocysts.

Program
- Polar body biopsy
- Blastomere biopsy (Day 3)
- Trophectoderm biopsy (Day 5)
- Use of laser for assisted hatching

Course design
- 2-day course
- Emphasis on hands-on time with one-to-one supervised practice, complemented by lectures and opened discussions
- 6 participants
- This course is targeted at embryologists

Minimum experience
It is essential that all participants are experienced ICSI practitioners with suitably advanced micromanipulation skills and expertise. Please note that the sessions will use Research Instruments Integra 3 systems and Saturn 5 Active™ lasers so participants must be prepared to use this type of micromanipulator.

Fee
Course fee is EUR 600. Transportation and accommodation are not included. Local transportation between hotels and the course venue will be arranged. Lunches and refreshments will be provided during the course.

Trophectoderm Biopsy & Genetic Testing for PGS

Course objectives
This two-day workshop aims to provide a comprehensive overview of biopsy of trophectoderm (TE) cells from blastocysts and consider the various approaches to genetic analysis. The workshop will explore methods for TE biopsy as well as consider handling, tubing and traceability of the sample. In addition, the methods for genetic testing and dealing with results will be explored.

Methods and tools for TE biopsy, including pipettes, media and hardware (including laser) will be discussed. Hands-on sessions will allow participants to practise TE biopsy using mouse embryos with additional emphasis on the handling and preparation of the biopsied samples, including tubing. The workshop will also examine working with off-site genetics labs.

The workshop is intended to provide participants with the core knowledge and introductory practical skills under the supervision of experienced practitioners. It is not intended to be a complete training programme to attain full clinical competence – participants are urged to complete a logbook of in-house training using supernumerary or abnormally fertilised oocytes/embryos donated for training or research.

Program
- Current status of genetic analysis for ART
- Establishing a PGS program
- Trophectoderm biopsy and tubing
- Working with a genetics service
- Hands-on sessions

Course design
- 2-day course
- Emphasis on hands-on time with one-to-one supervised practice, complemented by lectures and opened discussions
- 6 participants
- This course is targeted at embryologists

Minimum experience
It is essential that all participants be experienced ICSI practitioners with suitably advanced micromanipulation skills and expertise. Please note that the sessions will use Research Instruments Integra 3 systems and Saturn 5 Active lasers.

Fee
Course fee is EUR 600. Transportation and accommodation are not included. Local transportation between hotels and the course venue will be arranged. Lunches and refreshments will be provided during the course.
Culture Media: Design, Testing and Use

Course objectives
This one-day workshop aims to provide a comprehensive overview of culture media for human IVF, with consideration of how media is developed. The workshop will evaluate both single step and sequential systems, examine choices of individual media components including protein supplements, and discuss factors such as vitamins and cytokines.

Methods for trialling culture media in the clinical environment will be discussed, with consideration of how media can be tested and how the data can be interpreted. Understanding differences between systems is important and the workshop will encourage debate about optimizing the use of media in clinical programs.

Program
• Culture systems: design elements of culture media
• Sequential system or single step
• ORIGIO and SAGE systems: comparing & optimizing performance
• Assessing culture systems – how to perform a trial

Course design
• 1-day course
• Lectures & directed discussions
• Tour of media production facilities
• Up to 20 participants
• This course is targeted towards any embryologist interested in learning more about the composition, design and testing of culture media

Minimum experience
Working as a clinical embryologist.

Fee
Course fee is EUR 100. Transportation and accommodation are not included. Local transportation between hotels and the course venue will be arranged. Lunches and refreshments will be provided during the course.

Design, build and start up your ART laboratory

Course objectives
This two-day workshop aims to provide an introduction to the fundamental principles involved in the design, layout and quality management of an IVF laboratory. Process mapping, the inherent relationship between the patient pathway and the clinical service, will be discussed within the context of IVF unit design. The primary importance of the IVF laboratory will be considered in relation to the installation, provision and back-up of essential services such as electricity, air-conditioning, medical gases and liquid nitrogen. The concept of low-risk quality management and lab layout will be discussed and demonstrated within the training lab, including electronic witnessing and ART management. Cryobank and disaster management will also be covered.

This workshop is intended to provide participants with the theoretical and practical knowledge expected of lab managers and directors, including those whose roles include lab design and quality management. Therefore, it is particularly aimed at more experienced embryologists seeking career progression into various management positions. Group participation is encouraged in order to further explore variations in lab design and management experienced within different regions of the world where supplies and demands can vary considerably.

Participants are encouraged to bring any preliminary designs of new clinics or refurbishment plans to the workshop.

Program
• Optimal design and layout of ART laboratories
• Selection of building materials
• Commissioning and validation of the laboratory
• Selection of equipment and disposables
• TQM, QA, KPI & SOPs

Course design
• 2-day course
• Lectures & directed discussions
• Maximum of 20 participants
• This workshop is targeted towards ART programs that are planning to re-build their current laboratories or build new clinics

Minimum experience
No previous experience needed, though participants should have a good understanding of the working of an ART laboratory and regulations that apply to ART labs in their country.

Fee
Course fee is EUR 100. Transportation and accommodation is not included. Local transportation between hotels and the course venue will be arranged. Lunches and refreshments will be provided during the course.
David Morroll

Dr Morroll has worked as a Clinical Embryologist since 1986, training in Manchester, where he also completed his PhD studies. He has since managed laboratories in a number of UK IVF units including those in Nottingham, London and Leeds, before joining ORIGIO a/s as Director of Embryology in November 2011.

He served as Chair of the UK Association of Clinical Embryologists (ACE) and Association of Biomedical Andrologists (ABA), and was involved with several working groups, notably the HFEA Expert Group on Multiple Births after IVF. David has a keen interest in quality management, including ISO certification and External Quality Assurance. He has also consulted to IVF units in Malta, India, the Philippines and Zimbabwe.

Steven Fleming

Dr Fleming is an Honorary Associate at the University of Sydney and Scientific Advisor to ORIGIO. Previously, he was the founding Scientific Director of Assisted Conception Australia, and a Senior Fellow at the University of Queensland.

After completing his PhD in 1987, he undertook postdoctoral research at the Royal North Shore Hospital in Sydney, and from 1993-1997 he was appointed Lecturer in Obstetrics and Gynaecology at the University of Nottingham in England, where he established the world’s first Master’s degree in Assisted Reproduction Technology with Dr Simon Fishel. From 1998-2008 Steven was the Scientific Director of Westmead Fertility Centre in Sydney and appointed Senior Lecturer in Obstetrics and Gynaecology at the University of Sydney. He is the recipient of numerous research grants, and an author and editor of several books, book chapters and peer reviewed journal articles. Steven’s research interests include cryopreservation, endometrial physiology, endometriosis and oocyte maturation, amongst others.

Martine Nijs

Dr. Nijs is an ESHRE accredited senior clinical embryologist, and co-founder, director and R&D consultant to the Embryolab Academy in Greece, and R&D consultant to the Nij Geertgen IVF and Andrology Laboratories in the Netherlands.

After obtaining her PhD in Medical Sciences at the Free University of Brussels in Belgium, Martine has been working as a senior clinical embryologist and later as an IVF lab director. She is an author of numerous peer reviewed publications and book chapters, and has presented hundreds of lectures as an invited speaker at meetings worldwide. She has been actively involved in organizing international conferences, workshops and one-to-one practical training. Martine is member of the Editorial Board Faculty 1000 Research, and ad hoc board member of nine international journals, and an active member of eight professional societies. Martine is supervising the Biopsy Technique courses for ORIGIO, and uses her keen interest in research and quality management to add great depth to her teachings.

Lodovico Parmegiani

Dr. Parmegiani obtained his degree in Biology in 1996 at the University of Bologna, Italy, and his post-graduate specialization in Biochemistry and Clinical Chemistry in 2000 at the University of Modena and Reggio Emilia, Italy.

He carried out his training as clinical embryologist at the Reproductive Endocrinology Center - S.Orsola Hospital in Bologna. Since 2002, Lodovico has been Laboratory Director at Reproductive Medicine Unit-GynePro Medical Centers in Bologna. In 2008 he received certification as Senior Clinical Embryologist from the European Society for Human Reproduction & Embryology (ESHRE). He has published several papers on the efficiency, safety and limits of human oocyte cryopreservation. Lodovico’s current research interests are cryobiology, gamete selection and micromanipulation.
Training Lab Locations

Copenhagen, Denmark
The ORIGIO Training Lab in Denmark is located in our Headquarters. The laboratory is fully equipped for performing most ART procedures.
For more information, contact: TrainingLabDK@origio.com.

Saint Petersburg, Russia
The Training Lab Russia is located at our ORIGIO office in Saint-Petersburg. The lab is equipped to perform most ART procedures. Certification embryology courses are held in the Lab on a regular basis.
For more information, contact: info-ru@origio.com

Mumbai, India
The ORIGIO Embryology Training School located in Mumbai provides comprehensive hands-on training in various aspects of ART from setting up a laboratory, handling and processing of gametes, embryo culture to embryo vitrification, equipment maintenance & ICSI.
For more information, contact: indiasales@origio.com.

Copenhagen, Denmark

Saint Petersburg, Russia

Mumbai, India

Yokohama City, Japan
ORIGIO ART Lab in Japan is well equipped for workshop and technical seminar. Global opinion leader as invited lecturer will present very sophisticated education and hands-on training program held at our ART Lab. You will enjoy the productive discussion with lecturer, delegates and our staff!
For more information, contact: mchiba@origio.com

Terms of Cancellation
ORIGIO a/s reserves the right to cancel a course up to 3 weeks before the start date without compensation though course fees will of course be refunded. In case of external unforeseen circumstances or sudden illness of our lecturers, compensation for travel expenses already incurred by the participant will be agreed individually.

Lecturers Continued

Colleen Lynch
Colleen Lynch MSc started working in the embryology field in 2004, following the completion of her undergraduate studies in Genetics and post graduate studies in Medical Genetics. She is currently working towards her PhD in Preimplantation Genetics under Professor Darren Griffin at the University of Kent. She joined CooperGenomics™ full time in 2017 after working for 13 years both as a clinical embryologist and managing the Genesis Genetics Europe laboratory.
Colleen has lectured on PGD and PGS at many international conferences and has co-authored a number of scientific papers and book chapters. She continues to run an ISO: 15189 accredited CooperGenomics laboratory in the UK, providing PGD and PGS to IVF clinics worldwide. She also teaches a trophectoderm biopsy and PGS course for ORIGIO, a CooperSurgical Fertility Company.
IVF and genomics market leaders Wallace, ORIGIO, Research Instruments, The Pipette Company, K-Systems, Reprogenetics, Recombine and Genesis Genetics have joined forces, as CooperSurgical companies, to provide a world class service for ART professionals.

We are working in partnership, pooling our scientific knowledge and collaborating with ART experts, to develop and provide a system of innovative products, solutions and services for the complete IVF process.