

# Cryopreservation of gametes, embryos and reproductive tissues: daily practice in your lab and clinic

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Theoretical sessions: 17 & 18 September 2015

Optional Hands-on Workshop: 19 September 2015

Thessaloniki, Greece

# Course Objectives

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-  Bring an up-to-date overview of the role of cryobiology in ART and fertility preservation.
-  Discuss outcomes and safety of cryopreservation of gametes, embryos and reproductive tissue
-  Discuss outcomes, benefits and restrictions of different cryobiology approaches
-  Learn to design strategies to prevent problems/issues in the laboratory or clinical practice in a cryopreservation program
-  Be trained in current laboratory techniques used in cryopreservation of gametes, embryos and reproductive tissues

## Target Audience

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This two-day workshop with optional one-day 'Hands-on' Workshop in cryopreservation laboratory techniques is designed for professionals working in ART, fertility preservation and cryobiology. Reproductive scientists, laboratory technicians, embryologists, specialist in reproductive medicine, clinicians as well as ART Unit managers who want to improve their theoretical and practical knowledge on cryopreservation of gametes, embryos and reproductive tissues.

Theoretical sessions are also designed for Bachelor and Master degree students as well as residents in training who are looking for an overview of cryobiology practices in ART.

The number of delegates in the Hands-on sessions is limited to 30.

Registration is based on a 'first come first serve basis'

# Topics

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## **Theoretical sessions**

The 'Theoretical sessions' will give an overview of the recent advances in cryopreservation of gametes, embryos and reproductive tissues.

## **Brains-on sessions**

In the 'Brains-on' sessions' delegates are invited to present a specific problem/trouble/issue they have or are encountering with **cryopreservation** in their clinic or laboratory. In this session, the expert team and the participants will investigate the problem/trouble/issue presented and will design a route for solving and preventing this (or other) problems in the future.

## **Optional 'Hands-on' Workshop in cryopreservation laboratory techniques**

In the 'Hands-on' session delegates will follow demonstrations and can train in different cryopreservation techniques:

- cryopreservation of ejaculated and testicular spermatozoa
- vitrification of oocytes and embryos and
- cryopreservation of ovarian tissue.

# Innovative aspects

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The workshop presents a unique up-to-date overview of the role of cryobiology in ART and fertility preservation. Outcomes, benefits and restrictions of different cryobiology approaches will be discussed. The faculty consists of top experts in the field. The workshop is designed to enhance exchange of information, stimulate learning and discussion on the best options of cryopreservation for different cohorts of patients. Informal discussion based on evidence based science and applicable in daily practice is strongly encouraged during this workshop.

# Workshop Directors

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## **Alexia Chatziparasidou**

M Clin Embryology, M Sc, Bac Sc, Sr Clinical Embryologist

## **Martine Nijs**

PhD, M Sc, Bac Sc, Sr Clinical Embryologist

## **Nikos Christoforidis**

MRCOG, DFFP, Gyn & Obstet, Fertility Specialist

# Accreditation

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Accreditation has been requested from the The European Accreditation Council for Continuing Medical Education (EACCME). The EACCME is an institution of the European Union of Medical Specialists (UEMS).

# Certificate of attendance

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A Certificate of attendance will be awarded to the delegates after attending the full workshop program. After completing the on-line evaluation form of the workshop, all certificates can be downloaded.

# Your Prominent Speakers

Embryolab Academy strives to provide evidence based scientific knowledge presented by an international panel of prominent lecturers. Our speakers have been carefully selected on the basis of the importance and weight of their scientific work in the specific domains of interest as well as their excellent educational skills.

The h-index is an index that attempts to measure both productivity and impact of the published work of a scientist. The index is based on the set of the scientist's most cited papers and the number of citations that they have received in other publications.

<p><b>Jane Saxton</b> PhD, BSc, FRCOG</p>	<p><i>Senior Clinical Embryologist IVF Unit Jessop Fertility, Sheffield, UK h-index: 3</i></p>	
<p><b>Alexia Chatziparasidou</b> M Clin Embryology, M Sc, BSc, ESHRE certified Senior Clinical</p>	<p><i>Embryologist Laboratory Director and founder of Embryolab, Thessaloniki, Greece; Co-founder Embryolab-Academy, Greece h-index: 3</i></p>	
<p><b>Dominic Stoop</b> PhD, MD, MRCOG, ESHRE board certified subspecialist in Reproductive Medicine and Surgery</p>	<p><i>Professor at the Free University of Brussels; Medical Director at the Centre for Reproductive Medicine, Free University of Brussels, Brussels, Belgium. h-index: 8</i></p>	
<p><b>Ingrid Segers</b> PhD, M Sc, Bac Sc, Senior Clinical Embryologist</p>	<p><i>Senior Clinical Embryologist at the Centre for Reproductive Medicine, Free University of Brussels; Member Oncofertility Team, Free University of Brussels, Brussels, Belgium h-index: 9</i></p>	

<p><b>Juergen Liebermann</b>  PhD, MSc, High-complexity  Clinical Laboratory Director  (ABB)</p>	<p>Director of the Embryology,  Andrology and Endocrinology Laboratories at the  Fertility Centers of Illinois, Chicago, USA  h-index: 13</p>	
<p><b>Roberta Maggiulli</b>  PhD, MSc, Bac Sc, ESHRE  certified Senior Clinical  Embryologist</p>	<p>IVF Lab Supervisor, Senior Clinical Embryologist at  GENERA Centres for Reproductive Medicine, Rom,  Italy. h-index: 3</p>	
<p><b>Martine Nijs</b>  PhD, MSc, Bac Sc, ESHRE  certified Senior Clinical  Embryologist</p>	<p>Scientific Director, Nij Geertgen, Elsendorp, Netherlands;  Research and Development Consultant Embryolab,  Thessaloniki, Greece; Director and co-founder of  Embryolab-Academy, Greece.  h-index: 21</p>	
<p><b>Mikkel Rosendahl</b>  PhD, MD</p>	<p>OnkoGynaecologist,  Copenhagen University Hospital - Rigshospitalet  h-index: 13</p>	
<p><b>Nikos Christoforidis</b>  MRCOG, DFFP, Gyn &amp; Obstet,  Fertility Specialist</p>	<p>Clinical Director of Embryolab, Thessaloniki, Greece;  Co-founder Embryolab-Academy, Greece</p>	

# Workshop Program

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## Program 17th of September 2015

### Morning session

Chair: Martine Nijs and Nikos Christoforidis	
<b>8:00 - 8:30</b>	<i>Registration with coffee and tea</i>
<b>8:30 - 8:40</b>	Welcome by the Director of the Embryolab Academy <b>Martine Nijs, Netherlands</b>
<b>8:40 - 9:20</b>	Understanding the fundamentals of cryobiology. <b>Juergen Liebermann, USA</b>
<b>9:20 - 10:00</b>	Oocyte cryopreservation: consistent and predictable laboratory and clinical outcomes are now achievable. <b>Roberta Maggiulli, Italy</b>
<b>10:00 - 10:40</b>	Indications for Oocyte cryostorage: donation, banking and social freezing: does it work? <b>Dominic Stoop, Belgium.</b>
<b>10:40 - 11:00</b>	<i>Coffee break</i>
<b>11:00 - 11:40</b>	Indications for sperm cryopreservation: donation, banking, social freezing, fertility preservation: does it work? <b>Jane Saxton, UK</b>
<b>11:40 - 12:20</b>	Sperm cryopreservation: a new or a forgotten laboratory craft? <b>Martine Nijs, Netherlands</b>
<b>12:20 - 13:15</b>	<i>Lunch</i>

## Program 17th of September 2015

## Afternoon Session

Chair: Dominic Stoop and Mikkel Rosendahl	
<b>13:15 - 13:55</b>	Embryo cryopreservation – is there room for both slow and vitrification methods in your cryopreservation program? <b>Juergen Liebermann, USA</b>
<b>13:55 - 14:35</b>	Oocyte and Embryo selection for freezing. Is it necessary? <b>Roberta Maggiulli, Italy</b>
<b>14:35 - 15:15</b>	Cryopreservation, a useful tool in a PGD program? <b>Alexia Chatziparasidou, Greece</b>
<b>15:15 - 15:45</b>	<i>Coffee break</i>
<b>15:45 - 16:15</b>	Cryopreservation-of-all strategies for oocytes and/or embryos: are cycle segmentation approaches feasible? <b>Nikos Christoforidis, Greece</b>
<b>16:15 - 16:45</b>	Cryopreservation as a specialised service in your unit: set up and management <b>Martine Nijs, Netherlands</b>
<b>16:45 - 17:15</b>	Risk and risk management in your cryopreservation program <b>Alexia Chatziparasidou, Greece</b>
<b>17:15-17:45</b>	TQM in your cryopreservation program: validation, KPI's, IQA and EQA <b>Jane Saxton, UK</b>
<b>19:30</b>	<i>Workshop Reception and Dinner</i>



# Program 18th of September 2015

Morning session

Brains-on session

Bring your troubles to us and we will 'shoot' them!

All invited speakers will take part of the expert panels	
<b>8:45 – 11:30</b>  <i>Including coffee break</i>	<p>In the 'Brains-on' sessions' delegates are invited to present in a break out session a specific problem/trouble/issue they have or are encountering with cryopreservation in their clinic or laboratory as a <b>Mini Poster</b>.</p> <p>In this session, the expert team and the participants will investigate the problem/trouble/issue presented and will design a route for solving and preventing this (or other) problems in the future.</p>
<b>11:30 – 12:00</b>	Summary of 'Brains-on' session
<b>12:00-13:00</b>	Lunch

Possible Topics are

- Since the last two days I am observing high rates of degeneration after thawing. How to find the cause?
- I want to start using a new type of carrier for vitrification. How do I validate them?
- We are moving to a clean room setting with our IVF laboratories. What about the cryopreservation lab? How do I validate this? What do I need to test?
- I am a gynecologist and how do I counsel my patient on different freezing strategies?
- I think that one my embryologists is performing poorly in the cryolab? How do I test in an objective way?
- We transported frozen semen of a HepC positive patient in our dryshipper. Can I use the dry shipper for transport of other samples or do I need to clean it first? Is this a non conformity?

# Program 18th of September 2015

## Afternoon session

Chair: Alexia Chatziparasidou and Jane Saxton	
<b>13:00 - 13:40</b>	Is cryopreservation of oocytes, sperm and embryos efficient and safe? How to measure? <b>Dominic Stoop, Belgium</b>
<b>13:40 - 14:20</b>	Fertility preservation in patients with malignant diseases: how to implement a safe and successful clinical program in your practice <b>Mikkel Rosendahl, Denmark</b>
<b>14:20 - 15:00</b>	Ovarian tissue cryopreservation: all the ins and outs for the lab. <b>Ingrid Segers, Belgium</b>
<b>15:00 - 15:30</b>	<i>Coffee break</i>
<b>15:30 - 16:10</b>	The continuous dialogue between patient, clinic and laboratory for replacement of cryopreserved gametes/embryos: a practical approach. <b>Nikos Christoforidis, Greece</b>
<b>16:10 - 16:50</b>	Successes and pitfalls in cryopreservation. <b>Martine Nijs, Netherlands</b>
<b>16:50 - 17:30</b>	<i>Closure of workshop and Farewell drink</i>  <i>Patio Makedonia Palace</i>

# Optional 'Hands-on' Workshop

in cryopreservation laboratory techniques

## Program 19th of September 2015 Embryolab Academy at Embryolab

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**Shuttle at 8:15 a.m. at Makedonia Palace Hotel  
to Venue of Hands-On workshop at Embryolab**

**Hands-on practice and demonstration**

**Topic 1: Cryopreservation of ejaculate and testicular sperm**

- Jane Saxton, UK
- Martine Nijs, the Netherlands

**Topic 2: Cryopreservation of ovarian tissue**

- Ingrid Segers, Belgium
- Mikkel Rosendahl, Denmark

**Topic 3: Vitrification of oocytes, embryos and blastocyst**

- Alexia Chatziparasidou, Greece
- Roberta Maggiulli, Italy

**Demonstration and training** of different methods will be available: closed carriers, single straw closed carriers, straw-in straw closed carriers... .

Three groups of max 10 participants each will follow a rota of workshops

Delegates will be allocated to one specific group.

Each group will follow a rota and spend 2 hours 30 per topic.

## ‘Hands-on’ Workshop Schedule

**19.09.2015**

Session A	Group 1	Group 2	Group 3
9:00 – 11:30	Topic 1 Cryopreservation of ejaculate and testicular sperm	Topic 2 Cryopreservation of ovarian tissue	Topic 3 Vitrification of oocytes, embryos and blastocyst
11:30 – 12:30	<i>Lunch &amp; Group picture</i>		
Session B	Group 1	Group 2	Group 3
12:30 – 15:00	Topic 3 Vitrification of oocytes, embryos and blastocysts	Topic 1 Cryopreservation of ejaculate and testicular sperm	Topic 2 Cryopreservation of ovarian tissue
15:00 – 15:30	<i>Coffee break</i>		
Session C	Group 1	Group 2	Group 3
15:30 – 18:00	Topic 2 Cryopreservation of ovarian tissue	Topic 3 Vitrification of oocytes, embryos and blastocyst	Topic 1 Cryopreservation of ejaculate and testicular sperm
18:00 – 18:30	Summary of Hands-on Workshop Fare well drink		

# Cryo Workshop Venue

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Makedonia Palace Hotel

2, Megalou Alexandrou Avenue, 546 40, Thessaloniki, Greece

Tel: (+30) 2310 897197

Fax: (+30) 2310 897211

[www.makedoniapalace.com](http://www.makedoniapalace.com)

# ‘Hands-on’ Workshop Venue

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Embryolab Academy at Embryolab, Assisted Reproduction Unit

173-175 Ethnikis Antistaseos

551 34 Kalamaria, Thessaloniki, Greece

w: [www.embryolab.co.uk](http://www.embryolab.co.uk)

e: [info@embryolab.co.uk](mailto:info@embryolab.co.uk)

# Workshop Secretariat

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Embryolab Academy

At Embryolab

173-175 Ethnikis Antistaseos, 551 34 Kalamaria, Thessaloniki, Greece

[info@embryolab-academy.org](mailto:info@embryolab-academy.org)

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[www.embryolab-academy.org](http://www.embryolab-academy.org)

Future activities – safe the date!

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Embryolab Academy Workshop

Total Quality and Risk Management in  
IVF laboratories:  
From theory to practise: edition 2

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18 & 19 March 2016

Leuven, Belgium

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Joint Symposium  
'Quality and Risk Management in IVF  
laboratories'

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11 & 12 December 2015

Rio De Janeiro, Brasil



EMBRYOLAB ACADEMY





# Embryolab Academy



[www.embryolab-academy.org](http://www.embryolab-academy.org)

**Embryolab Academy** is a non-profit foundation, focused on education, training and research in assisted reproduction.

**Embryolab Academy** promotes close collaboration between embryologists, andrologists, fertility specialists, scientists and human geneticists to improve quality, safety and accuracy in assisted reproduction techniques, and reproductive medicine.

The objectives of the **Embryolab Academy** are to:

- Organise and host international Workshops, focused on state of the art assisted reproduction techniques, and reproductive medicine.
- Provide individual, hands-on courses and training in assisted reproduction techniques, and reproductive medicine.
- Promote and coordinate research in the field of assisted reproduction techniques, and reproductive medicine.
- Promote communication, collaboration and exchange of expertise between different specialist, working in assisted reproduction techniques, and reproductive medicine.

## *Director*

Martine Nijs  
PhD, M Sc, Bac Sc, Sr Clinical Embryologist

## *Board*

Alexia Chatziparasidou  
M Clin Embryology, M Sc, Bac Sc, Sr Clinical Embryologist

Nikos Christoforidis  
MRCOG, DFFP, Gyn & Obstet, Fertility Specialist



EMBRYOLAB ACADEMY

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Cryopreservation of gametes, embryos, blastocysts and reproductive tissues:  
daily practise in your lab and clinic