

## COMPOSITION OF TRAINING GROUPS

Each training group will be made up of a maximum of 6 people, with 3 expert monitors available, one monitor for every two people.

In exceptional circumstances, we can form groups up to 8 people.

It is possible to carry out training events in other countries, where the reproduction centres are situated, providing that there will be a minimum time for organisation i.e. availability of flights for travel.

## POSSIBLE LANGUAGES

Given that the aim is for the training process to be universal, courses will be held in Spanish and English. There is also possibility for these to be carried out in French, Italian, German, Chinese and Arabic; and in these cases, we will work with team of translators from the international department at GINEMED.

In the case, that the training is outside of Spain, the training will be carried out in English or Spanish.

## COST OF THE TRAINING

The cost of the training is €650, which includes all the necessary materials, also with evening dinner for the Friday included.

### More Information and enrolments:

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## COURSE OF VITRIFICATION DE-VITRIFICATION WITH

## CLOSED SYSTEM OF CRYOPRESERVATION SAFESPEED

System developed by:



With the support:



Safespeed, commercialised by:



**Ginemed Foundation** is making available a training course for laboratories, clinics and biologists for the vitrification-de-vitrification of gametes and embryos by the new closed system of cryopreservation, SafeSpeed,

The new system has been developed as a “spin off” by the University of Seville SafePreservation, and has been tested at Ginemed for the last three years.

Following demonstrating the excellent results of the new system in the **30th Meeting of the European Society Reproduction and Embriology (ESHRE 2014) held in Munich**, and following the success obtained both in the conference and in the communication media, Ginemed´s Foundation has implemented a Training Plan for the vitrification-de-vitrification of the gametes and embryos, with the state of the art closed system, SafeSpeed.



## Target groups

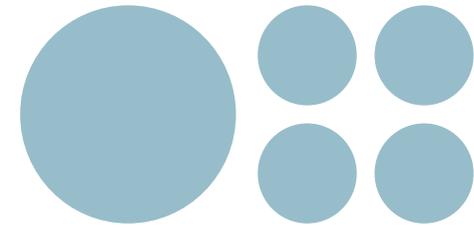
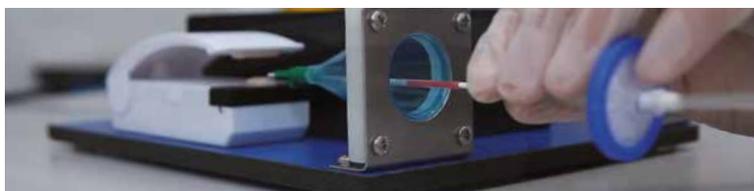
Biologists, embryologists, biotechnologists, gynaecologists, andrologists and any other professional interested in enhancing his/her knowledge in cryopreservation, specifically in closed systems.



## AIMS OF TRAINING COURSE

### Main Aim

The main aim of this training course is to provide the theoretical and practical competence necessary to carry out the vitrification of human gametes and embryos with the SafeSpeed system successfully, in that once the training has been completed, the professional will be capable of implanting this technique in his/her clinical practice with the best results from the moment of completing the training process.



### Specific Aims

- Acquire the theoretical knowledge that will allow one to develop the necessary technical capabilities for optimum vitrification of the gametes and embryos with the SafeSpeed system.
- To get to know and identify the variables, which can be determining in the survival of the oocytes and the embryos: to be able to control them and to systematize a vitrification protocol, which allows one to achieve reproducible results.
- Identify the critical parts of the vitrification process and the reheating and acquire the necessary abilities for knowledge and resolutions.
- To get to know the safest form of loading the samples and their retrieval in the reheating solution.
- Acquire the technical abilities and the practical handling, which allow for implementing the vitrification of gametes and embryos by the system of SafeSpeed – in their laboratory, from the first moment of completing the training process.
- Both during the theoretical and practical stage, there will be special emphasis on overcoming the critical parts of the vitrification and reheating process, such as the loading of samples and the retrieval of these in the reheating solution.
- Achieve the survival of the de-vitrification for more than 90% of the oocytes following vitrification in the closed system SafeSpeed.

### ¿Why vitrify with SafeSpeed?

The system SafeSpeed is made up of an ultrafine capillary made from polycarbonate, where the samples are loaded for their cryopreservation, attached to a embryo straw of plastic with a sliding protector cap.

SafeSpeed has been designed with the philosophy of not just optimizing the cooling but also the reheating, which has a better impact on the survival of biological samples in the vitrification process; (Mazur et al, 2011.) and carrying this out in closed tube for the vitrification.

The design of the straw is based on research by the group of the Professor Ramón Risco, from the School of Engineers of Seville, using capillaries of quartz, having developed the combination of thickness, length and the connection between diameters, both internal and external, as optimal for the best rates of heat transfer.

The SafeSpeed tube SafeSpeed is hermetically sealed in both extremes, capillary and straw, so that the biological samples never come into contact with the liquid nitrogen during the vitrification and subsequently, neither in their storage, avoiding any risk of contamination.

Above all, it deals with a simple but robust technique, easy to learn, and with which the embryologists will be able to obtain the results they desire, from the first day, after their training of a maximum of 8 hours.

## COURSE CALENDAR

Every month we hold at least two sessions of the vitrification - de-vitrification course with the closed system, for course dates, you can consult [docencia@ginemed.es](mailto:docencia@ginemed.es)

or by ringing (+34) 954 991 051 / (+34) 607 759 506

Depending on needs, one can organize an “Ad Hoc” course.

## WORK METHODOLOGY

The course will take place from Friday to Saturday and will be made up of a theoretical part and practical part.

### Friday afternoon

#### Theoretical Part. (90 minutes)

Analysis of the variables which determine vitrification possibilities. (15 minutes)

Characteristics of **SafeSpeed** System. (15 minutes)

Comprehensive reading of the protocol and resolving doubts. (60 minutes)

#### Practical Module (150 minutes)

Introduction and handling of materials and accessories of SafeSpeed technique. (30 minutes)

Tackling critical points of protocol. (30 minutes)

Practical vitrification batches with waste materials. (2 batches, 60 minutes each)

### Saturday morning

#### Practical module. (240 minutes)

Session to clear up any doubts.

Practical vitrification batches with waste materials. (3 batches, 60 minutes each)

### MATERIALS INCLUDED

- \_ SafeSpeed Vitrification Kit, with mediums and straws.
- \_ Work Protocol and workbook.
- \_ Extraction system and connectors.