

International Advanced ICAS Training Course

Cryopreservation of Mammalian Ovarian Tissue as well as Spermatozoa, Oocytes, Embryos by Conventional (Programmed) Freezing and Vitrification for Oncology and Reproductology (Course Signature 03-01-09)

Date: July 16-18, 2009

Location: Science Conference Center of Ulm University
"Schloss Reisingburg", 89312 Guenzburg, Germany

Course Language: English

Programme Directors:

Prof. Dr. Rolf Kreienberg, Director, Clinic for Gynecology and Obstetrics, Ulm University

Prof. Dr. Jürgen Weiss, Head of Division Endocrinology and Reproduction Medicine, Clinic for Gynecology and Obstetrics, Ulm University

Dr. Evgenia Isachenko, Division of Endocrinology and Reproduction Medicine

Dr. Vladimir Isachenko, Division of Endocrinology and Reproduction Medicine

Course Design:

This course will have three major parts. The **first part** will contain basic lectures regarding the principles and scientific approaches to the cryobiology of oocytes, embryos as well as the use in reproductive and veterinary medicine. The **major focus** will be on the hands-on session to be conducted in the second part of the course. The participants will learn directly the tricks and possibilities for cryopreservation and thawing of biological material as well as the kits that are available for vitrification and thawing, which can be used for any stage of human pre-implantation cells. The **third part** of the course will allow intensive discussions regarding the methods used and the means and ways of assessing their viability. Important issues in this session are the aseptic vitrification of mammalian oocytes and embryos and the cryoprotectant-free vitrification of human ICSI spermatozoa.

The course is aimed at postgraduate students and specialists in the field of mammalian tissue cryopreservation in reproductive medicine and veterinary medicine. The participants will have the opportunity to acquire knowledge and skills by attending the lectures, the laboratory exercises and the hands-on sessions. The participation in the course will be recognized by CME accreditation of the EACCME (European Accreditation for Continuing Medical Education).

Course Fee: € 750,- (for registration until May 4, 2009)
€ 850,- (for registration after May 4, 2009)

Deadline for Registration: July 1, 2009

The course fee includes the participation in the various course activities including meals. Accommodation at the Science Conference Center "Schloss Reisingburg" will be charged separately during stay according to individual choice of room (single room Cat. I: € 65,50; single room Cat. II: € 61,50; double room: € 118,00 (breakfast buffet included)).

A limited number of grants to cover part of the course fee are available for participants from low-income countries on a justified application to the ICAS Secretariat (letter of motivation, curriculum vitae).

Deadline for Application: April 27, 2009



ICAS

Further Details from:

ICAS Secretariat, Ulm University

Director: Prof. Dr. Theodor M. Fliedner

Assistant Director: Dr. Marcel Sailer

Executive Secretary: Ms. Colette Steinwachs

Helmholtzstrasse 20, D-89081 Ulm

Phone: +49-731-500-69404, Fax: 500-69406

e-mail: theodor.fliedner@uni-ulm.de

<http://icas.uni-ulm.de>

A Division of the Faculty of Medicine
University of Ulm



Course Contents

Session I:

Informatory lectures

- Oncological treatment in young patients and protection of reproductive function
- First German experience of the transplantation of cryopreserved human ovarian tissue
- Cryoprotectant-free vitrification of human spermatozoa: theory and practical application
- Cryobiology as field of knowledge and application in reproductive medicine and oncology
- Aseptic application of vitrification of human oocytes and embryos

Session II:

Demonstration and hands-on manipulations

- Conventional freezing of human ovarian tissue
- Long-term transport of ovarian tissue
- Preparation of strips of ovarian tissue: release of cortex from parenchyma
- Saturation of tissue by cryoprotectants using new special freezing medium for ovarian tissue OvarStore
- Freezing of strips in 2 ml Cryo-Vials and 1 ml straws using Erlangen-freezing system and different freezing constructions (Cryologic, IceCube, BioCool, Planer)
- Very quick thawing of ovarian tissue in boiling water and removal of cryoprotectants
- In vitro culture of ovarian tissue
- Evaluation of quality of ovarian tissue: quality of follicles as central object of this evaluation
- Vitrification of human ovarian tissue
- Preparation of vitrification solution and saturation by permeable cryoprotectants
- Quick cooling of ovarian tissue by direct dropping into liquid nitrogen
- Quick warming of ovarian tissue by direct dropping into liquid nitrogen

Session III:

Hands-on and extensive discussion

- Aseptic vitrification of human oocytes and embryos
- Cryoprotectant-free vitrification of human ICSI spermatozoa
- Round table with hands-on repeated manipulations of all methodologies

ICAS