

Objective:

The Reproductive Medicine (RM) as well as the Reproductive Endocrinology and Infertility (REI) subspecialties were formed within obstetrics and gynecology to address the breadth and depth of gynecologic and reproductive issues ranging from puberty through menopause, keeping in mind however safety and efficacy as they are critically important for successful clinical care. To this end, professional (clinical) and academic education, gained through medical specialty and subspecialty training, must be constantly updated to optimize patient outcomes. RM specialists are consultants for complex gynecologic conditions such as the management of hormonal dysfunction e.g. hypo/hyperthyroidism, hyperprolactinemia; chronic anovulation and metabolic syndromes such as polycystic ovarian disease, menopausal hormonal replacement therapy, as well as fibroids, endometriosis, and abnormal bleeding. In addition to endocrinology and organic disease, REI training covers the complexity of human reproduction, including the various forms of assisted reproductive technologies (ARTs), fertility preservation, embryology, genetics, andrology, gamete micromanipulation and microsurgical techniques as well as noninvasive, minimal surgeries. The present course is a continuum of our educational mission aiming to further knowledge through lectures and debates by and among board-certified specialists in Obstetrics and Gynecology devoted to Reproductive Medicine.

Background Information:

The progressive aging process, at least in highest resource's countries and the number older women pregnancies is since many years a new reality. In a changed condition we want to explore reality, knowledge, evidence and new research aspects of aging in woman and reproductive health.

With these objectives in mind, we developed the 12th annual two-day course meeting, structured with lectures and debates these topics along with seven days of practical and simulation training. These educational efforts are supported by the Humanitas Fertility Center facilities. This year's conference will **include 6 sessions with 20 presentations** (15 minutes each) and, as in the previous years, session chairs and discussants will support interactive debates. **4 Invited lectures** by national and international experts will be also presented. Even with the possible limitations due to the Covid 19 pandemic, **the 2022 Conference will be in presence**. Some speakers only will be connected by a **special interactive platform**, implemented by our Institute, and successfully tested in the 2020 and 2021 conference editions.

Main topics

1. Cell aging process
2. Gametes aging process
3. Aging process environmental role
4. Adds on in aged couples
5. Infertility and ART in older patients
6. Pregnancy and delivery in older women

Learning Program:

By attending the course, the participants will acquire:

- Evidence and research aspects of cell aging process
- Evidence and research aspects of gamete's aging process
- Environmental role in the process of aging
- Evidence and research add on in aged couples
- Infertility aspects and clinical evaluation in older patients
- Clinical and research ART differences in the treatment of older couples
- Differences in pregnancy and delivery assistance in older women

Audience:

Physicians and other health care professionals working in reproductive and women health centers.

GENERAL INFORMATION

The course is divided into two parts:

FIRST PART: Friday, September 16th – Saturday, September 17th, 2022.

Venue: Via Manzoni 113, 20089 Rozzano (MI)

SECOND PART: One week of attendance at the Fertility Center of Humanitas Research Hospital.

The weeks (assigned by the director) allow the participation of two people, under the guidance of a tutor, to the practical application of all medical-biological techniques related to Medically Assisted Procreation as well as structured access to the Humanitas Training Center.

REGISTRATION:

Participation of the 2-days including topics and debates is free of charge.

The participation fee for one week (five working days) is also free of charge.

Students, Ob-Gyn residents and RM fellows of the Humanitas University and University of Milan, School of Medicine (theoretical part) are all formally invited to participate.

People attending the course will be able to participate in the theory only or both the theory and practice. Registrations to theory + practice are limited to 20 participants. If registrations exceed 20, participants will be selected based on request date and curriculum.

CME:

The course is part of the legislation that regulates the CME. The course is accredited as a single theoretical course

Accredited professional categories:

- Surgeon within the disciplines of obstetrics and gynecology or urology
- Biologist, biotechnologists, midwives, nurses

The issuing of credits is subject to effective participation in the entire educational program and the completion of a learning assessment questionnaire once the course is completed.

The CME credits will be awarded to all those that:

- Belong to the listed professions
- Pass the assessment test

Under the auspice of:



The 12th Humanitas Course in Reproductive Medicine

Aging in Reproduction and Woman Health

The Humanitas Fertility Center, continuing a historical scientific and educational tradition, is offering a two-day gathering – September 16th-17th, 2022, to provide clinical and research updates in reproduction as well as the opportunity to access the Fertility Center facilities for a training course.

16th 17th September 2022

ON SITE EVENT

Under the auspice of:

Humanitas University
EBCOG/ESHRE Subspecialty in Reproductive Medicine
Società Italiana di Ostetricia e Ginecologia (SIGO)
Società Italiana di Fertilità e Sterilità e Medicina della Riproduzione (Sifes e MR)

Scientific Organizer

Paolo Emanuele Levi-Setti

Scientific Committee:

David Albertini, Giovanni Cotichio, Nicoletta Di Simone, Pasquale Patrizio

Local Organizing Committee:

Andrea Busnelli, Federico Cirillo, Noemi Di Segni, Valentina Immediata, Annalisa Inversetti, Massimo Romano, Camilla Ronchetti



Advanced Preliminary program

Friday September 16th, 2022

08:30 Opening remarks and description of the conference

Paolo Emanuele Levi-Setti

09:00 1st Invited Opening Lecture:

Reproductive aging: Sociodemographic and clinical aspects

Pasquale Patrizio

1° session – Evidence and research aspects of cell aging process

Chairs: Carlo Bulletti, Maurizio Guido

09:30 Mainstream pathways of cell ageing

Carla Tatone

09:45 Oocyte rejuvenation by cell manipulation: mission impossible?

Maria José De los Santos

10:00 The ageing endometrium

Andrea Romano

10:15 Discussion

Discussants: Filippo Ubaldi, Valeria Liprandi

10:45 Coffee Break

11:15 2nd Invited Lecture:

The aging women

Carlos Simon

2° session – Evidence and research aspects of gamete's aging process

Chairs: Andrea Borini, Valeria Savasi

11:45 How age trips chromosome segregation

Eva Hoffmann

12:00 Oocyte ageing beyond aneuploidies

Daniela Bebbere

12:15 Do sperm age?

Chris Barratt

12:30 Discussion

Discussants: Pasquale Patrizio, Lucia De Santis

13:00 Lunch

3° session – Aging process environmental role

Chairs: Roberto Palermo, Luciana De Lauretis

14:00 Aging male DNA or environmental effect

Andrea Garolla

14:15 Inflammation role in Oocyte aging

Lynae Brayboy

14:30 Pre-Implantation Factor (PIF) in aging process

Eytan Barnea

14:45 Because aging starts during pregnancy

Paolo Levi-Setti

15:00 Discussion

Discussants: Edgardo Somigliana, Sara Chigioni

15:30 3rd Invited Lecture:

Ovarian aging as a balancing act between death and survival

David Albertini

16:00 Coffee Break

4° session – Evidence and research add on in aged couples

Chairs: Mario Minzini Renzini, Valentina Parini

16:30 Oocyte/embryo accumulation to improve outcome rates in older patients

J Garcia Velasco

16:45 Antioxidants role in aging reproductive process

Lynae Brayboy

17:00 Adds on in older patients

Andrea Busnelli

17:15 Culture media in older patients and the epigenetic impact

Yves Menezo

17:30 Discussion

Discussants: David Albertini, Roberto Palermo

Saturday September 17th, 2022

5° session – Infertility and ART in older patients

Chairs: Giulia Scaravelli, Elena Albani

09:00 PGT-a prospective in older patients

Antonio Capalbo

09:15 An integrated clinical and laboratory strategy to treat older couples

David Albertini

09:30 Induction strategies in older patients

Carlo Alviggi

09:45 Discussion

Discussants: Annalisa Inversetti, Federico Cirillo

10:15 Coffee Break

6° session – Pregnancy and delivery in older women

Chairs: Nicoletta Di Simone, Annamaria Marconi

10:45 Neurodevelopmental outcomes and adverse obstetrics outcomes: impact of advanced maternal age

Anja Pinborg

11:00 Thromboembolic complications in pregnancy: impact of maternal age

Maria Amparo Santamaria Ortiz

11:15 Stillbirth and ageing: new ways to predict older mums' risks

Rosemary Townsend

11:30 Discussion

Discussants: Massimo Candiani, Enrico Ferrazzi

12:00 4th Invited Lecture:

Preeclampsia and pregnancy: impact of maternal age

Manu Vatish

12:30 Conclusions and ECM