Objective:

The subspecialty of Reproductive Endocrinology and Infertility (REI) - Reproductive Medicine (RM) was 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) training and academic education, gained through medical specialty and subspecialty training, must be constantly updated to optimize patient outcomes.

REI 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 an essential 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. ART specialists (embryologists, technicians, and nurses) and experts at large tertiary-care centers supported by several European and American colleagues.

Background Information:

The process of international standardization of training requirements needs to be fulfilled to set minimal universal criteria to satisfy the breadth of knowledge, clinical training and certification processes required to effectively practice within the discipline. Improvement in the learning process through simulation in all the diverse clinical and biologic aspects of RM is one of our future goals along with furthering novel scientific innovations and new technologies that advance global reproductive health for all women.

With these objectives in mind, we developed an annual two-day course structured with lectures and debates on a variety of 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 18 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.

Due to the possible limitations due to the Covid 19 pandemic, **only a limited number of participants** will be allowed to be physically present. All the other both speakers and participants will be connected by **a special interactive platform**, implemented by our Institute, and successfully tested in the 2020 conference edition.

Main topic

- 1. KPIs in the management of infertile women with endometriosis
- 2. KPIs Induction protocols in normal, high, poor responders and for preimplantation testing.
- 3. Follicular development and trigger KPIs
- 4. Oocyte retrieval and embryo transfer KPIs
- 5. Sperm preparation and embryo culture KPIs
- 6. Embryo and oocyte vitrification and warming KPIs.

GENERAL INFORMATION

The event will be both onsite and online

Dates: Friday, October 1st – Saturday, October 2nd, 2021.

Venue: Humanitas University, Via Rita Levi Montalcini 4, Pieve Emanuele - Building B

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Online at: https://my.humanitasedu.it

REGISTRATION:

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

Registrations are open online at: www.humanitasedu.it

Green pass certification is required to enter the event and will be asked at the registration

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, midwifes, 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.

Under the auspice of:













The 11th Humanitas Course in Reproductive Medicine

Key Performance Indexes (KPI's) in infertility's diagnosis and treatment.

The Humanitas Fertility Center, continuing a historical scientific and educational tradition, is offering a two-day gathering – October 1-2, 2021, to provide clinical and research updates in reproduction as well as the opportunity to access the Fertility Center facilities for a training course.

1st - 2nd October 2021

ON SITE and ONLINE EVENT

Under the auspice of:

Humanitas University

The Yale Fertility Center

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 Organizers:

Paolo Emanuele Levi-Setti Pasquale Patrizio

Local Committee:

Andrea Busnelli Federico Cirillo Valentina Immediata Noemi Di Segni

PROGRAM

Friday OCTOBER 1st, 2021

- 08:00 Opening remarks and description of the conference Paolo Emanuele Levi-Setti
- 08:15 Opening Lecture: Performance Indexes Dominique De Ziegler

<u>1° session</u> – KPIs in the management of infertile women with endometriosis Chairs: Dominique De Ziegler, Massimo Candiani

- 08:45 Advancements in endometriosis surgical techniques to preserve ovarian reserve

 Nicola Pluchino
- 09:00 Novel therapeutic targets to improve IVF outcomes in endometriosis patients

 Nuria Pellicer
- 09:15 Pregnancy health in women with endometriosis undergoing IVF Andrea Busnelli
- 09:30 When and how could endometriosis surgery benefit fertility preservation?

 Anis Feki
- 09:45 Discussion on the previous session's topics Discussants: *Valeria Savasi, Edgardo Somigliana*
- 10:15 Coffee Break
- 10:45 1st invited lecture: Intracytoplasmic sperm injection versus conventional in-vitro fertilisation in couples with non-male factor infertility

 Ben W Mol

<u>2° session</u> – Induction protocols KPIs: past, present and possible future

Chairs: Andrea Borini, Roberto Palermo

- 11:15 Baseline characteristics: are they still so important?

 Mauro Cozzolino
- 11:30 KPIs in managing poor prognosis patients *Carlo Alviggi*
- 11:45 KPIs in high responders Alberto Revelli
- 12:00 Progestins for pituitary suppression during ovarian stimulation for ART Martina Capuzzo
- 12:15 Discussion on the previous session's topics
 Discussants: Valentina Immediata, Paola Anserini
- 13:00 Lunch Break

<u>3° session</u> – KPIs, outcome measures and prognostic factors

Chairs: Filippo Ubaldi, Noemi Di Segni

- 14:00 Oocyte elective cryopreservation KPIS Nicole Noyes
- 14:15 Fertilization rate as a novel indicator for Cumulative Live Birth rate Carlotta Zacà
- 14:30 Prognostic model for Familiar Cumulative Live Birth rate *Valentina Immediata*
- 14:45 Discussion on the previous session's topics Discussants: *Carlo Bulletti, Andrea Borini*

15:30 3rd invited Lecture: Limitations and benefits for PGT-A testing as an add-on IVF procedures Glenn Schattman

16:00 Coffee Break

4° session – KPIs in oocyte retrieval and embryo transfer

Chairs: Francesco Fusi, Paolo Emanuele Levi-Setti

- 16:30 The Trajectory of Early Pregnancy Units Roy Farquharson
- 16:45 Oocytes' retrieval rate: time to abandon follicle flushing Camilla Ronchetti
- 17:00 ET as KPI I how to set up values Tatjana Motrenko Simic
- 17:15 Operators performing embryo transfer role Federico Cirillo
- 17:30 Simulation in ART competence: an engineer's view *Fabio Carfaana*
- 17:45 Discussion on the previous session's topics
 Discussants: Gianluca Gennarelli, Patrizia Sulpizio
- 18:15 End of day 1

Saturday OCTOBER 2nd, 2021

<u>5° session</u> – Sperm preparation and embryo culture

Chairs: Laura Rienzi

- 09:00 Variables affecting long-term usage rate of sperm samples cryopreserved for fertility preservation in cancer patients *Marco Reschini*
- 09:15 Culture Media KPIs Lucia De Santis
- 09:30 One sperm protocol fit all?

 Annalisa Navarra
- 09:45 Discussion on the previous session's topics Discussant: *Elena Albani*

10:15 Coffee Break

6° session – Embryo and oocyte vitrification and warming KPIs

Chairs: Annamaria Marconi, Alessandro Bulfoni

- 10:45 The human factor in vitrification performance Laura Rienzi
- 11:00 Developmentally incompetent preimplantation embryos (DIPE) Danilo Cimadomo
- 11:15 Blastocyst post warming time lapse Sara Chigioni
- 11:30 Discussion on the previous session's topics Discussants: *Nicoletta Di Simone, Enrico Ferrazzi*
- 12:30 4th invited lecture: KPIs in REI fellowship *Pasquale Patrizio*
- 12:45 Conclusions and ECM format compilation