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PhD in Medical Sciences  
2017-2018

INVITATION to the Public defence of

**Filippo Maria UBALDI**

To obtain the academic degree of '**DOCTOR IN MEDICAL SCIENCES**'

**Management of severe male factor infertility in IVF.**

**Thursday 31 May 2018**

Auditorium **Piet Brouwer**, 17:00

Faculty of Medicine and Pharmacy, Laarbeeklaan 103, 1090 Brussel

How to reach the campus Jette:

<http://www.vub.ac.be/english/infoabout/campuses>

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## Summary of the dissertation

Since the first report of a successful delivery from in vitro fertilization in 1978, the advances in the field of assisted reproductive techniques grew over time, especially dealing with male factor infertility.

Male factor infertility due to oligo-, astheno-, teratozoospermia, a combination of the three conditions (OAT), or even a complete absence of spermatozoa in the ejaculate (azoospermia), is partially or fully responsible for approximately 20-70% of cases of infertility. In the past, men with a condition of azoospermia or cryptozoospermia were considered sterile, and sperm donation was their only reproductive option. In 1992, the development of ICSI drastically modified this scenario and decreased the impact of male factor in couples undergoing IVF. More recently, the advances introduced in IVF (i.e. blastocyst culture, vitrification, preimplantation genetic testing) and the implementation of surgical sperm retrieval procedures allowed us to treat also men with a condition of severe-OAT, cryptozoospermia or azoospermia. Yet, couples showing male factor infertility require careful clinical and lifestyle behavior evaluation, and medical treatment whenever feasible before ICSI. Finally, some authors suggested that severe male factor may contribute to a higher prevalence of aneuploid embryos in IVF. However, recent evidence questioned those data by supporting that the euploidy rate and implantation potential of the blastocysts obtained are independent from male factor. The possible effect of the severe male factor on early embryo development could be very likely related only to fertilization and developmental potential to the blastocyst stage.

## Curriculum Vitae

Filippo Maria Ubaldi is a Medical Doctor, Clinical Director at the GENERA Centres for Reproductive Medicine in Rome, Marostica, Umbertide and Naples, Italy. After his degree in Obstetrics and Gynecology, he spent 3 years (from 1993 to 1996) as a staff member in CRG UZ Brussels, where he published several scientific papers in peer-reviewed journals. Master in Andrology and Reproductive Medicine, he is also intensely dedicated to educational, editorial and practitioner activities. Author/co-author of 8 books on the topic of Reproductive Medicine and of 119 scientific papers published in peer reviewed journals; author H-index is 40. Editor of the treaty on Reproductive Medicine 'Medicina della Riproduzione Umana' published in Italy in 2010. Invited speaker at over 400 National and International congresses on the topic of Reproductive Medicine, and Scientific Coordinator of more than 30 congresses and courses. Member of the ESHRE Executive Committee during 2005-2009, he has been Chairman of the 26th ESHRE Annual Meeting held in Rome in June 2010. In 2014, he received by the Ministry of the University and Scientific Research, the National Scientific License as full Professor in Obstetrics and Gynecology. During 2014-2015, he has been member of the technical advisory board established by the Ministry of Health on heterologous fertilization.