

## **Promotor**

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Vrije Universiteit Brussel

FACULTEIT GENEESKUNDE EN FARMACIE

## **Doctoraat in de Medische Wetenschappen**

Academiejaar 2011-2012

## **UITNODIGING**

Voor de openbare verdediging van het  
doctoraatsproefschrift van

**Florence BELVA**

Donderdag 31 mei 2012

U wordt vriendelijk uitgenodigd op de openbare verdediging van het proefschrift van

**Florence BELVA**

**'Health of ICSI children'**

Op **donderdag 31 mei 2012** om **17 uur** in auditorium **P. Brouwer** van de Faculteit Geneeskunde & Farmacie Laarbeeklaan 103, 1090 Brussel

### **Situering van het proefschrift**

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Intracytoplasmic Sperm Injection (ICSI) involves the injection of one spermatozoon directly into an oocyt. This technique was developed 20 years ago at the UZ Brussel for the alleviation of infertility due to severe semen abnormalities. Although, today, more than 2.5 million children are born after ICSI worldwide, safety concerns for the offspring remain since a number of steps occurring in natural conception are being bypassed. The research topic of this thesis is the medical health outcome of pre-pubertal and pubertal children conceived by ICSI in comparison with peers born after spontaneous conception. The study at the age of 8 years was one of the first to investigate overall health and trends in morbidity in ICSI and therefore a broad scale of developmental aspects were studied. Due to the important finding of higher blood pressure in 8-year-old ICSI offspring, a follow-up study was set up at the age of 14 years in order to evaluate cardiometabolic disease risk following ICSI. In view of this, adiposity risk and blood pressure measurements were assessed. Since ICSI children and their peers proceeded into puberty, sexual maturation and early detectable infertility markers were additionally assessed in the worldwide eldest ICSI cohort followed since birth.

### **Curriculum Vitae**

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Florence Belva was born in Etterbeek in August 1973. She studied Latin-Mathematics at the OLV-Lyceum, Genk, followed by Medicine at the KU Leuven, where she graduated in 1998 with great distinction. She successfully completed her residency in Pediatrics in 2003 at the KU Leuven.

In 2003 she started as a clinical research fellow at the Department of Medical Genetics of the UZ Brussel where she was enrolled in a pre-designed study regarding the overall health of 8-year-old children born after Intracytoplasmic Sperm Injection (ICSI). Later, in 2008, she applied successfully for a FWO funded research project, under promotorship of Prof Dr P Devroey and Prof Dr M Bonduelle, and this was the start of her PhD concerning the health outcome of ICSI children.

She is author and co-author of 8 peer-reviewed articles in international journals. She is reviewer for several journals and since 2011 she is appointed as associate editor of Human Reproduction.

Florence is married to Guido Giacalone and proud mother of Luisa, Giulia and Martha.