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PhD in Medical Sciences
2016-2017

INVITATION to the Public defence of

Gilles FARON

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

**Contribution to optimising the use of two promising
preterm labour screening markers**

Tuesday 06 Juni 2017

Auditorium **Vanden Driessche**, 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>

Summary of the dissertation

Prematurity is a serious medical and socio-economic burden for the community. Every effort to improve its consequences is worthwhile. Preterm delivery is considered as a syndrome that can use different pathways. These allow different approaches for risk screening. In this work, we have studied the clinical value of 2 promising markers of preterm delivery.

The first marker studied is based on the early separation of the chorion from the decidua. This is observed when preterm contractions occur, with release of a glycoprotein, called foetal fibronectin (fFn), in the cervico-vaginal secretions. The place of the test based on its dosage in our clinical arsenal remains unclear. We demonstrate here that, to be interpretable, the test should never be done on cervical samples, and never within the 24 h following coitus. Furthermore, considering likelihood ratios as the best objective parameters to evaluate the performance of a test, our two meta-analyses clearly showed that this test was disappointing as a screening method as well as a diagnostic tool whatever the clinical settings considered. The second marker studied concerns *Ureaplasma* spp., which is involved as pathogenic agent leading to preterm delivery. Thanks to two prospective studies, we have been able to demonstrate that carriage of *U. spp.* is constant during pregnancy and that it is present at a significantly higher level (both qualitatively and quantitatively) in vaginal secretions than in those from the cervix. We have also pointed out that bacterial vaginosis is more often associated with *U. urealyticum* than with *U. parvum*, indicating a greater potential deleterious effect from the first. This thesis provides new important information for the understanding of parts of the preterm delivery process and should be a step toward other clinical studies.

Curriculum Vitae

Gilles FARON

Birth place and date: Le Mans (France), 27 September 1964.

Nationalities: French and Belgian (naturalisation 7-1990).

Education

- From 78-82: Athénée Royal de Ath (Ath, Belgique)
- From 82-89: Faculty of Medicine, Université Libre de Bruxelles

graduated (MD) with the highest distinction in July 1989

- From 89-94: Residency in Gynecology & Obstetrics, Université Libre de Bruxelles

graduated with the highest distinction in October 1994

- From 11/94- 11/96: Fellowship in Maternal & Fetal Medicine, Université Laval (Québec, Canada, 6/97)

Master in Epidemiology (MSc), graduated in January 1998, Université Laval (Québec, Canada)

Professional Experience

- From 97 to 2007: Junior and then Senior Staff Member, Hôpital Universitaire Brugmann

- From 2008 until...: Senior Staff Member, Universitair Ziekenhuis Brussel.

Publications

Authors of 21 peer-reviewed international publications (11 as 1st author) and of 2 textbooks. He has also been speaker in a dozen of international congresses.