

# RBMO Digest June 2022

## Introduction

Welcome to our second RBMO Digest of 2022. This issue contains all our specially selected articles from recent months, including Editorials, Editor's Choice papers, Hot Topics with insights from Editors Richard Anderson and Mina Alikani, all the latest Review articles and a focus on our Experimental Reproductive Biology section.

In journal news, we are very pleased to have launched two new initiatives to give us the ability to communicate a little more regularly and flexibly with our community directly. A monthly newsletter titled **RBMO Insights**, and an accompanying [RBMO mailing list](#).

The monthly issues of **RBMO Insights** will complement this quarterly Digest with different selections of articles on specific themes, and a range of details about our journal activity, giving our readers greater insights into behind-the-scenes information, tips & tricks on publishing, peer review, communicating your work and more.

We invite you to [view the archive and subscribe](#) if you are interested in receiving more regular information about RBMO, our papers, authors, editors and activities.

On the subject of activities; we held a fantastic RBMO LIVE webinar at the start of June highlighting papers from our Reproduction, Technology and Society section. You can catch up on the recording on the [IVF Initiative website](#). Keep an eye on RBMO Insights and or social media channels for details of the next episode on 6<sup>th</sup> September. We are looking forward to the rest of a year that will see more long-awaited in-person meetings between colleagues around the world. Several of our RBMO Editorial team and board members will be attending the [ESHRE conference](#) in Milan in July, and in November we are proud partners to the COGI World Congress on Controversies in Obstetrics, Gynecology & Infertility in Amsterdam. A special offer on [super early registration](#) is available until the end of July.

Bart Fauser  
Chief Editor, RBMO



## Editorials

Our recently published Editorials from Chief Editor, Bart Fauser and our RBMO Editors.

### **Chief Editor's 2021 annual report**

Bart C.J.M. Fauser, Duncan Nicholas, Kamal Ahuja

### **Endometrial scratching: is it all over?**

Stefano Palomba, Nick Macklon

## Hot topics

Our Editors Richard Anderson and Mina Alikani select their hot topic articles from recently accepted papers, highlighting developments and progress across reproductive biomedicine.

### **Artificially prepared frozen embryo transfer cycles are associated with an increased risk of preeclampsia**

Roelens et al.

Further evidence (from a cohort study) showing that FET in ovulatory cycles is associated with a lower risk of preeclampsia than in artificial cycles. A large RCT is needed to resolve this question, and in parallel, what is it from the corpus luteum that underpins this?

### **The impact of the oocyte donor's age on the recipient's outcomes: should we exclude very young women from oocyte donation?**

Roca et al.

Here the focus of analysis shifts from older age to the youngest, providing evidence that women under the age of 25 don't make the best oocyte donors. This adds to previous data on poorer pregnancy outcomes in very young women, and highlights the need to understand the wider aspects of the development of reproductive maturity.

### **Accumulation of periconceptional maternal social, lifestyle and medical risk factors and impairment of embryonic growth: The Rotterdam Periconceptional Cohort (Predict Study)**

van Zundert et al.

The impact of social, lifestyle and medical factors on pregnancy outcomes is well recognised, but here the authors expand this into showing that early pregnancy fetal growth is also affected. Greater detail could translate into effective interventions. IVF/ICSI pregnancies did not show the same effects, but also showed much lower prevalence of the adverse factors.

### **Computer software (SiD) assisted real-time single sperm selection correlates with fertilization and blastocyst formation**

Chavez-Badiola et al.

In this innovative and interesting paper, the authors describe an automated system for selection of individual sperm for ICSI based on key movement characteristics. The promise of the study is substantial: replacing yet another subjective laboratory practice with an objective and data-driven process.

## Editor's Choice

Papers selected by Prof. Fauser as highlights from each of our recent issues

**Does underlying infertility in natural conception modify the epigenetic control of imprinted genes and transposable elements in newborns?**

Fauque et al.

**Testicular biopsy for fertility preservation in early-diagnosed Klinefelter patients: patient characteristics and long-term follow-up?**

Braye et al.

**Pregnancy, fertility concerns and fertility preservation procedures in a national study of French breast cancer survivors**

Mangiardi-Veltin et al.

**Non-invasive embryo selection strategy for clinical IVF to avoid wastage of potentially competent embryos**

Chen et al.

**A microenvironment of high lactate and low pH created by the blastocyst promotes endometrial receptivity and implantation**

Gurner et al.

## Reviews

All Review articles published in RBMO are made free to read on publication, to support access to current knowledge and enhance the skills of researchers, clinicians and reproductive biomedical professionals around the world.

**Hormone therapy in women with premature ovarian insufficiency: a systematic review and meta-analysis**

Gonçalves et al.

**A meta-analysis of serum lipid profiles in premature ovarian insufficiency**

Wang et al.

**Artificial intelligence in the embryology laboratory: a review**

Dimitriadis et al.

## Featured Section

### Experimental Reproductive Biology

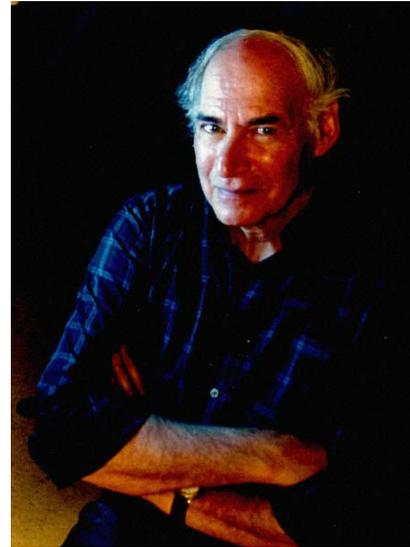
Section Editor

Prof. Jonathon van Blerkom

University of Colorado Boulder, USA

“As an *Experimental Reproductive Biology* Section Editor for RBMO for many years, it has been my privilege to see the publication of exciting studies that have offered new technologies and findings leading to a clearer understanding of the causes of early developmental failure and infertility.

Looking forward, I can think of no other time that promises to be as innovative (if not controversial) and productive with respect to the biological underpinnings of human fertility, infertility and outcome and for which, RBMO will continue to play a central role as a premier format for the dissemination of new knowledge.”



Recent highlights from our **Experimental Reproductive Biology** Section:

**Long-time low-temperature transportation of human ovarian tissue before cryopreservation**

Cheng et al.

**The mechanism of action of oxytocin antagonist nolasiban in ART in healthy female volunteers**

Pierzyński et al.

**Exosomes and their cargo are important regulators of cell function in endometriosis**

Freger et al.

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# RBMO

## EXPERIMENTAL REPRODUCTIVE BIOLOGY

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**A section of RBMO focussing on** basic science studies in reproduction, including both animal and human research – relating to the development and function of male and female reproductive organs in health and disease, gametogenesis, fertilization, placenta, embryo development and early pregnancy.

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**Reproductive senescence impairs the energy metabolism of human luteinized granulosa cells**

Nardini Cecchino et al.

**Oestrogen up-regulates DNMT1 and leads to the hypermethylation of RUNX3 in the malignant transformation of ovarian endometriosis**

Wang et al.

**Revascularization of human ovarian grafts is equally efficient from both sides of the cortex tissue**

Kristensen et al.

**Hypoxia and oxidative stress in ovarian tissue after transplantation: systematic review of growth factors, hormones and antioxidants to improve follicle outcomes**

Cacciottola et al.

**The safety of VASApresumptive adult ovarian stem cells**

Tocci

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