



ESRI Summer School and  
14<sup>th</sup> Conference of the  
European Society for  
Reproductive Immunology,  
ESRI2017



KOS  
ISLAND  
GREECE

September 27-28 and  
September 29-October 2, 2017

## SCIENTIFIC PROGRAMME

### Summer School

**Wednesday 27/9/2017**

**8:00-8:45 Registration**

**8:45-9:00 Welcome addresses**

M. Varla-Leftherioti, M. Spyropoulou-Vlachou

**9:00-10:00 Session 1. Introduction**

- Immune System: Structure and Function: K. Bakela (Greece)
- Immune system and the reproductive process: Th. Keramitsoglou (Greece)

**10:00-10:30 Coffee break**

**10:30-12:00 Session 2. Immunopathology in the reproductive system**

- Immunological factors affecting male reproduction: M. Kurpisz (Poland)
- Immunological factors affecting female reproduction: I. Athanassakis (Greece)
- Pregnancy and autoimmune diseases: H. Komninou (Greece)

**12:00-14:30 Lunch break**

**14:30-16:00 Session 3. Immune-mediated abortions**

- Critical assessment of all cell line and animal models in reproduction: U. Markert (Germany)
- APA-associated abortions: Z. Ulkova-Galova (Czech Republic)
- Non-APA associated abortions: M. Daniilidis (Greece)

**16:30-17:00 Coffee break**

**17:00-18:30 Session 4. Testing couples for immune-mediated RSA**

- Immunological test in the peripheral blood: M. Spyropoulou-Vlachou (Greece)
- Histology-Immunohistochemistry: Ch. Tzannatou (Greece)
- Other but immunological factors: infectious and thrombophilic : M. Varla-Leftherioti and P. Drakakis (Greece)



**Thursday 28/9/2017**

**9:00-10:30 Session 1. ART today**

- The role of Natural cycle IVF in the context of modern ART: M. Mastrominas (Greece)
- Freezing the timeline - vitrification in clinical embryology: Ch. Mentorou (Greece)
- Fertility preservation in gynecological cancer patients: the role of the reproductive physician: P. Drakakis (Greece)

**13:00-11:00 Coffee break**

**11:00-12:00 Session 2. RIF**

- Immunological factors involved in embryo implantation (maternal, paternal, embryonic): S. Kalantaridou (Greece)
- Logistics in testing couples for immune-mediated RIFs: R. Roussev (Bulgaria)

**12:00-14:30 Lunch break**

**14:30-16:00 Session 3. Immunotherapy for the prevention of RSA and RIF**

- Immunotherapy in recurrent pregnancy loss and implantation failure - what is the evidence? O. Christiansen (Denmark)
- Ivlg as adjuvant therapy in human reproductive failure: J. Gil-Herrera (Spain)
- Recurrent pregnancy loss: from evidence medicine to personalized medicine  
H. Carp (Israel)

**16:30-17:00 Coffee break**

**17:00- 18:00 Session 4. RSA and RIF: New Technologies and alternative therapies**

- Endometrial receptivity disorders as revealed by 3D ultramicroscopy: G. Nikas (Greece)
- The role of nutrition and supplements: Ch. Balamoti (Greece)

**Discussion and Interactive questionnaire for Students after each session**



**Friday 29/9/2017**

**9:00- 12:00 Specialists' meeting**

Coordinators: M. Varla-Leftherioti, H. Carp

Discussion for the establishment of guidelines and the creation of an ESRI Registry for Immune subfertility

**14<sup>th</sup> Conference**

**Friday 29/9/2017**

18:00-20:00 **Opening Ceremony**

- **Welcome addresses**
- **Hippocratic Medicine with special emphasis on Immunology and Reproduction**  
**S. Geroulanos**
- **Opening Lecture**  
*65 years of Reproductive Immunology*  
**G. Chauat (France)**
- **Welcome Reception**

**Saturday 30/9/2017**

08:30-10:00 **Plenary Session A: The embryo as antigen I**

- **Embryo Implantation and Pregnancy: Immunologic Intricacies and Strategies for its Success: G. Chauat (France)**
- **Glycans in Reproductive Immunology: S. Galuska (Germany)**

**O1**

**L-carnitine affects the early stage embryo development**

C. Kyvelidou, I. Athanassakis

Immunology Lab, Department of Biology, University of Crete, Heraklion, Crete, Greece

**10:00-10:30 Coffee break**



## 10:30-12:00 Plenary Session B: The embryo as antigen II

- Successful Implantation from the Embryonic Aspect: **J. Szekeres-Bartho** (Hungary)
- Embryo dependant immune alterations: **I. Athanassakis** (Greece)

### 02

#### **The Effect of Overdosed Light Exposure on the Cleavage Rate and Implantation Capacity of Mice Embryos**

Z. Bognár<sup>2,3</sup>, T. J. Csabai<sup>1, 2</sup>, J. Bódis<sup>2,3,4</sup>, É. Görgey<sup>1</sup>, J. Szekeres- Barthó<sup>1,2,3</sup>

1 Department of Medical Biology, University of Pécs, Medical School, Hungary

2 Janos Szentágothai Research Centre, Pécs, Hungary

3 Human Reproduction Research Group, University of Pécs, Hungarian Academy of Sciences, Hungary

4 Department of Obstetrics and Gynaecology, University of Pécs, Hungary

### 03

#### **Effect of EVs containing miR-141 and -519d on trophoblastic-endothelial interaction**

R.N. Gutiérrez-Samudio, U. R. Markert, D. M. Morales-Prieto.

Placenta-Lab. Department of Obstetrics. University Hospital Jena, Jena, Germany.

## 12:00-14:30 Lunch break

## 14:30-15:45 Plenary Session C: The placenta as an immunological barrier

- Placental Immunopathology: **V.Tsilivakos** (Greece)
- Placenta-derived exosomes and syncytiotrophoblast microparticles: **L. Mincheva-Nilsson** (Sweden)

### 04

#### **Role of G-CSF treatment in recurrent miscarriage on the expression of FOXP3, VEGF, VEGF-R2 and C-KIT in first trimester decidua**

F. Scarpellini, M.Sbracia.

CERM-Hungaria, Rome Italy

## 15:45-17:00 POSTER SESSION - Coffee break





## Sunday 1/10/2017

8:30-10:30 **Plenary Session D: Regulation of the maternal immune response**

- Th1/Th2/Th17 cells in Pregnancy **MP Piccinni** (Italy)
- Expression and function of galectins at the feto-maternal interface: **U. Jescke** (Germany)

**05**

### **Profiling Tregs and MDSCs during murine pregnancy**

P. Goumenaki, I. Athanassakis

Immunology lab, Biology Department, University of Crete, Greece

**06**

### **Analysis of EZH2 expression in Regulatory T-cells**

A. Velichkov<sup>1</sup>, R. Susurkova<sup>1</sup>, A. Mihova<sup>2</sup>, M. Guenova<sup>2</sup>, I. Antonova<sup>3</sup>, G. Nikolov<sup>3</sup>, V. Terzieva<sup>1</sup>

<sup>1</sup> Institute of Biology and Immunology of Reproduction, BAS, Sofia, Bulgaria

<sup>2</sup> National Specialised Hospital for Active Treatment of Haematological Diseases, Sofia, Bulgaria

<sup>3</sup> Medical Center "Reprobiomed", Sofia, Bulgaria

**10:30-11:00 Coffee break**

11:00-12:30 **Plenary Session E: Inflammation and the maternal immune response**

- Inflammosome in the human endometrium: further step in the evaluation of the "maternal side": **N. Di Simone** (Italy)
- Stress-related endocrine changes during pregnancy: **G. Mastorakos** (Greece)

**07**

### **Mycobacterial L-FORMS and Vdelta2-cell response in the placentobiome of BCG vaccinated pregnant women**

T. Dimova<sup>1</sup>, A Terzieva<sup>1</sup>, L. Djerov<sup>2</sup>, A. Nikolov<sup>2</sup>, V. Dimitrova<sup>2</sup>, P. Grozdanov<sup>3</sup>, N. Markova<sup>3</sup>

<sup>1</sup>Institute of Biology and Immunology of Reproduction "Acad. K.Bratanov" Bulgarian Academy of Sciences, Sofia, Bulgaria

<sup>2</sup>Medical University, University Obstetrics and Gynecology Hospital "Mother House", Sofia, Bulgaria

<sup>3</sup>Institute of Microbiology "Acad. St. Angelof, "Bulgarian Academy of Sciences, Sofia, Bulgaria

**08**

### **Effect of the anti-microbial therapy on V $\gamma$ 9V $\delta$ 2 T cells in RSA women with Chlamydial cervic/vaginal infection**

I. Voskakis,<sup>1</sup> Ch. Tsekoura,<sup>1</sup> Th. Keramitsoglou,<sup>1</sup> K. Avdeliodi,<sup>1</sup> E. Tsantoulas,<sup>2</sup> G. Creatsas,<sup>2</sup> E. Deligeoroglou,<sup>1</sup> M. Varla-Leftherioti

1. General Hospital "Helena Venizelou –Alexandra" "Helena Venizelou" Hospital, Athens, Greece

2. National and Kapodistrian University of Athens. School of Medicine. Aretaieio Hospital, Athens, Greece



**12:30-14:30 Lunch break**

**14:30-16:30 JRI Young Investigator Awards Session**

## **Basic Science**

### **BS1**

#### **Interleukin-17-producing decidual CD4+ T cells are not deleterious for human pregnancy when they also produce Interleukin-4**

L. Lombardelli<sup>1</sup>, F. Logiodice<sup>1</sup>, M. Aguerre-Girr<sup>2</sup>, O. Kullolli<sup>1</sup>, H. Haller<sup>5</sup>, Y. Casart<sup>2</sup>, A. Berrebi<sup>4</sup>, F.-E. L'Faqihi-Olive<sup>2</sup>, V. Duplan<sup>2</sup>, D. Rukavina<sup>4</sup>, Ph. Le Bouteiller<sup>2</sup>, M.-P. Piccinni<sup>1</sup>

<sup>1</sup>Department of Experimental and Clinical Medicine and DENOTHE Excellence Center, University of Florence, , Italy

<sup>2</sup>INSERM UMR1043, CNRS UMR5282, Université de Toulouse III, Centre de Physiopathologie Toulouse-Purpan, Toulouse, France

<sup>3</sup>Gynécologie-Obstétrique, Hôpital Paule de Viguier, Toulouse, France

<sup>4</sup>University of Rijeka, Medical Faculty, Department of Physiology and Immunology, Rijeka, Croatia

<sup>5</sup>University of Rijeka, Medical Faculty, Department of Gynecology and Obstetrics, Rijeka, Croatia.

### **BS3**

#### **Embryonic AVB3 integrin expression in 2cell and 4cell mouse embryos after ovarian stimulation**

A. Anyfantaki<sup>1</sup>, M. Fraidakis<sup>1</sup>, P. Tsakoumi<sup>1</sup>, E. Mathioudakis<sup>1</sup>, E. Neofytou<sup>2</sup>, Ch. Stathopoulou<sup>3</sup>, E. Athanaki<sup>4</sup>

<sup>1</sup>Crete Fertility Centre, Heraklion Crete, Greece

<sup>2</sup>Medical School- Aristotle University, Unit for Human Reproduction - 1st Dept of Obstetrics and Gynecology, Thessaloniki, Greece

<sup>3</sup>Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology, Heraklion Crete, Greece

<sup>4</sup>Department of Biology, Laboratory of Immunology, University of Crete, Heraklion, Crete, Greece.

### **BS4**

#### **TREGITOPES as a novel immunoregulators of pregnancy tolerance in abortion-prone matings**

A.E. Kedzierska<sup>1</sup>, D. Lorek<sup>1</sup>, A. Slawek<sup>1</sup>, A. Chelmonska-Soyta<sup>1</sup>

<sup>1</sup>Hirsfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wroclaw, Poland

## **Clinical Science**

### **CS1**

#### **The study of genetic polymorphisms for KIR2DL4, LILRB1, LILRB2 receptors and their ligand - HLA-G in recurrent implantation failure**

K. Wilczyńska<sup>1</sup>, M. Jasek<sup>1</sup>, M. Wagner<sup>1</sup>, W. Niepiekto-Miniewska<sup>1</sup>, A. Wiśniewski<sup>1</sup>, P. Radwan<sup>2,3</sup>, M. Radwan<sup>2</sup>, J. R. Wilczyński<sup>4</sup>, A. Malinowski<sup>5</sup>, P. Kuśnierczyk<sup>1</sup>, I. Nowak<sup>1</sup>



<sup>1</sup> Department of Clinical Immunology, Laboratory of Immunogenetics and Tissue Immunology, Ludwik Hirsfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wrocław, Poland;

<sup>2</sup> Department of Reproductive Medicine, Gameta Hospital, Rzgów, Poland;

<sup>3</sup> Biogeno - Regional Science-Technology Centre, Podzamcze, Chęciny Kielce, Poland;

<sup>4</sup> Department of Gynecology and Gynecologic Oncology, Polish Mothers' Memorial Hospital–Research Institute, Łódź, Poland;

<sup>5</sup> Department of Surgical, Endoscopic and Oncologic Gynecology, Polish Mothers' Memorial Hospital–Research Institute, Łódź, Poland;

## CS2

### Effects of chemotherapeutic agents on MIR-132 expression in human ovarian granulosa cells

B. Al-Kawlan<sup>1</sup>, D. Morales Prieto<sup>1</sup>, A. Fritzsche<sup>2</sup>, S. Winkler<sup>2</sup>, U. R Markert<sup>1</sup>

<sup>1</sup> Placenta Lab, Department of Obstetrics, University Hospital Jena, Germany

<sup>2</sup> Center for Reproductive Medicine, Jena, Germany

## CS3

### Pregnancy Complications in Women with Lectin Complement Pathway Deficiency

<sup>1</sup>H. Hrbáčková , <sup>2</sup> K. Malíčková , <sup>1</sup> M. Koucký , <sup>1</sup> A. Černý , <sup>1</sup> E. Gáborová , <sup>2</sup> H. Kopřivová , <sup>2</sup> M. Hindoš , <sup>2</sup> T. Zima

General University Hospital, 1st Faculty of Medicine of Charles University, Prague, Czech Republic

1 Department of Gynecology and Obstetrics

2 Department of Medical Biochemistry and Laboratory Diagnostics

## CS4

### Antiphospholipid syndrome (APS) more frequent in long-lasting female users of hormonal contraception

Z.Ulcova-Gallova<sup>1,2</sup>, K. Bibkova<sup>1</sup>, Z. Micanova<sup>1</sup>, P. Losan<sup>1</sup>

Genetics-Pilsen<sup>1</sup>, Dpt. of Obstetrics and Gynecology of Medical School of Charles University<sup>2</sup>, Pilsen, Czech Republic

**16:30-17:00 Coffee break**

**17:00-18:30 Plenary Session Transplantation in Reproduction**

- The allograft and the semiallograft: **I. Doxiadis** (NL/GER)
- Ovary Transplantation: **M. Fraidakis** (Greece)
- Innate uterine immunity affects on the allogeneic fetus: **K. Beaman** (USA)
- The Immunomodulatory effect of breast feeding: **G. Liosis** (Greece)

**18:30-19:30 General Assembly**

**20:00- Gala Dinner**





## Monday 2/10/2017

9:00-10:30 **Plenary Session F: Autoimmunity and infertility**

- Antiphospholipid Syndrome: **G. Girardi** (UK)
- Autoimmunities during pregnancy: **Z. Ulkova-Galova** (Czech Republic)
- Is immunogenetics involved in successful treatment of azoospermia?: **M. Kurpisz** (Poland)

**O9**

**PIF expression in endometriosis: its possible role in inducing ectopic endometrium immune-privilege**

M. Sbracia, F. Scarpellini  
CERM-HUNGARIA, Rome Italy

**O10**

**Polymorphic immune molecules in gametes and gametal fluids**

I Sachouli, S. Tsagdi, C. Kyvelidou, I. Athanassakis  
Immunology Lab, Department of Biology,  
University of Crete, Heraklion, Greece

**O11**

**Association between tumor necrosis factor- $\alpha$  gene -1031T/C promoter polymorphism and endometriosis**

N. Drakou, D. Mavrogianni, A. Protopapas, S. Stavrou, D. Loutradis, P. Drakakis  
Molecular Biology of Reproduction unit, Assisted Reproduction Division, 1st Ob/Gyn Dept, Medical School, National and Kapodistrian University of Athens, Greece

**10:30-11:00 Coffee break**

11:00-12:00 Closing Lecture:

Updating Darwin: Information and entropy drive the evolution of life: **IR Cohen** (Israel)

**12:00-12:30 Closing Ceremony- JRI Awards Ceremony**