



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. Tzanatou (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: 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

14th 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. Chaouat (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. Chaouat** (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^{2,3}, T. J. Csabai^{1, 2}, J. Bódis^{2,3,4}, É. Görgey¹, J. Szekeres- Barthó^{1,2,3}

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. Velichkov¹, R. Susurkova¹, A. Mihova², M. Guenova², I. Antonova³, G. Nikolov³, V. Terzieva¹

¹ Institute of Biology and Immunology of Reproduction, BAS, Sofia, Bulgaria

² National Specialised Hospital for Active Treatment of Haematological Diseases, Sofia, Bulgaria

³ 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. Dimova¹, A Terzieva¹, L. Djerov², A. Nikolov², V. Dimitrova², P. Grozdanov³, N. Markova³

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

² Medical University, University Obstetrics and Gynecology Hospital "Mother House", Sofia, Bulgaria

³ Institute of Microbiology "Acad. St. Angelof", Bulgarian Academy of Sciences, Sofia, Bulgaria

08

Effect of the anti-microbial therapy on Vγ9Vδ2 T cells in RSA women with Chlamydial cervic/vaginal infection

¹I. Voskakis, ¹Ch. Tsekoura, ¹Th. Keramitsoglou, ¹K. Avdeliodi, ¹E. Tsantoulas, ²G. Creatsas, ²E. Deligeoroglou, ¹M. 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. Lombardelli¹, F. Logiodice¹, M. Aguerre-Girr², O. Kullolli¹, H. Haller⁵, Y. Casart², A. Berrebi⁴, F.-E. L'Faqihi-Olive², V. Duplan², D. Rukavina⁴, Ph. Le Bouteiller², M.-P. Piccinni¹

¹Department of Experimental and Clinical Medicine and DENOTHE Excellence Center, University of Florence, , Italy

²INSERM UMR1043, CNRS UMR5282, Université de Toulouse III, Centre de Physiopathologie Toulouse-Purpan, Toulouse, France

³Gynécologie-Obstétrique, Hôpital Paule de Viguier, Toulouse, France

⁴University of Rijeka, Medical Faculty, Department of Physiology and Immunology, Rijeka, Croatia

⁵University 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. Anyfantaki¹, M. Fraidakis¹, P. Tsakoumi¹, E. Mathioudakis¹, E. Neofytou², Ch. Stathopoulou³, E. Athanaki⁴

¹Crete Fertility Centre, Heraklion Crete, Greece

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

³Institute of Molecular Biology and Biotechnology, Foundation for Research and Technology, Heraklion Crete, Greece

⁴Department 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. Kedzierska¹, D. Lorek¹, A. Slawek¹, A. Chelmonska-Soyta¹

¹Hirsfeld 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. Wilczyńska¹, M. Jasek¹, M. Wagner¹, W. Niepiekło-Miniewska¹, A. Wiśniewski¹, P. Radwan^{2,3}, M. Radwan², J. R. Wilczyński⁴, A. Malinowski⁵, P. Kuśnierczyk¹, I. Nowak¹



¹ Department of Clinical Immunology, Laboratory of Immunogenetics and Tissue Immunology, Ludwik Hirszfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wrocław, Poland;

² Department of Reproductive Medicine, Gameta Hospital, Rzgów, Poland;

³ Biogeno - Regional Science-Technology Centre, Podzamcze, Chęciny Kielce, Poland;

⁴ Department of Gynecology and Gynecologic Oncology, Polish Mothers' Memorial Hospital—Research Institute, Łódź, Poland;

⁵ 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-Kawlan¹, D. Morales Prieto¹, A. Fritzsche², S. Winkler², U. R Markert¹

¹ Placenta Lab, Department of Obstetrics, University Hospital Jena, Germany

² Center for Reproductive Medicine, Jena, Germany

CS3

Pregnancy Complications in Women with Lectin Complement Pathway Deficiency

¹H. Hrbáčková, ²K. Malíčková, ¹M. Koucký, ¹A. Černý, ¹E. Gáborová, ²H. Kopřivová, ²M. Hindoš, ²T. 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^{1,2}, K. Bibkova¹, Z. Micanova¹, P. Losan¹

Genetics-Pilsen¹, Dpt. of Obstetrics and Gynecology of Medical School of Charles University², 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- α 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