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)
• IvIg 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

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, T. J. Csaba, J. Bódis, É. Görgey, J. Szekeres- Barthó
1 Department of Medical Biology, University of Pécs, Medical School, Hungary
2 Janos Szentágóthai 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
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**, R. Susurkova, A. Mihova, M. Guenova, I. Antonova, G. Nikolov, V. Terzieva
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
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 Vy9Vδ2 T cells in RSA women with Chlamydial cervic/vaginal infection
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
¹Hirszfeld 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. Radwan²,³, M. Radwan², J. R. Wilczyński¹, A. Malinowski³, P. Kuśnierzcyk¹, I. Nowak¹
CS2
**Effects of chemotherapeutic agents on MIR-132 expression in human ovarian granulosa cells**
B. Al-Kawlani¹, 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**
H. Hrbáčková, K. Malíčková, M. Koucký, A. Černý, E. Gáborová, H. Kopřivová, M. Hindoš, 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, K. Bibkova, Z. Micanova, P. Losan
1, Dpt. of Obstetrics and Gynecology of Medical School of Charles University, Pilsen, Czech Republic
2 Genetics-Pilsen, Dept. of Obstetrics and Gynecology of Medical School of Charles University, 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 gametial 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-a 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