

Report from the International Society for Immunology of Reproduction (ISIR)

Council and Executive

The elections ballot for the new Council was held in April 2013 and counted in Boston, USA in May 2013. The new Council is as follows:

Charles (Chuck) Wira (USA) (President)
Ian Sargent (UK) (President-Elect)
Shigeru Saito (Japan) (Treasurer)
Joanne Kwak-Kim (USA) (Secretary)
Julia Szekeres-Bartho (Hungary) (Immediate Past-President)

Councillors;

Gil Mor (USA)
Ole Christiansen (Denmark)
Petra Arck (Germany)
Hiroaki Shibahara (Japan)
Satish Gupta (India)
Tatsuya Yamamoto (Japan)

IUIS representative: Sarah Robertson (Australia)

XIII International Congress of Reproductive Immunology 2013

The XIII International Congress of Reproductive Immunology was held in Boston, Massachusetts, USA on May 29 - June 2, 2013. It was hosted by the American Society for Reproductive Immunology and co-chaired by Drs Charles R. Wira (Dartmouth Medical School), Surendra Sharma (Brown University) and Gil Mor (Yale University). A total of 342 participants, including scientists, clinicians, trainees and students from >40 countries and regional societies, assembled to communicate their research with the theme of "Building Bridges in Reproductive Immunology" in the main meeting and pre-congress workshops. The Program spanned a wide range of topics concerning immunological factors in reproductive physiology and reproductive medicine, with a special focus on the challenges that interfere with reproductive health including an emphasis on HIV and other sexually transmitted infections (STIs). Cutting-edge topics in female and male reproductive function covered gamete development, embryogenesis, pregnancy, placenta and the fetus; STIs; mucosal immunology; developmental immunology; and translational research in infertility and pathologies of pregnancy, as well as vaccines for STIs and fertility control. A highlight was the opening plenary from Francoise Barré-Sinoussi, Nobel Laureate 2008 in Medicine, on the topic of "Where are we, and where are we going, in protecting the host against HIV?". The meeting was an outstanding success in advancing scientific understanding, building collegiate spirit and mentoring development of young researchers to sustain the future of our field.

Recent Meetings

The 2012 annual meetings of the European Society for Reproductive Immunology (ESRI) and the American Society for Reproductive immunology (ASRI) were held in conjunction in Hamburg, June 2012. This was the first of a series, with plans to regularly hold joint meetings between ASRI and ESRI, alternating one or the other side of the Atlantic, every few years.

Several regional meetings have been held in the past 12 months to develop activities in specific topic areas and countries. These include a new clinical series in the US (2nd Clinical Reproductive Immunology Symposium at Yale University, May 2012), plus regional meetings in Brazil (4th Latin American Symposium on Reproductive Immunology at Iguazu Falls, February 2013), and Bulgaria (13th International Symposium for Immunology of Reproduction in Varna, June 2012).

All have been well attended, financially profitable, and of a high scientific quality.

Future Meetings

The 34th Annual meeting of ASRI will be held June 1-4 in Long Beach, USA. The 11th Congress of the ESRI will be held in Budapest March 30 - April 1, 2014. Several regional meetings are planned in the near future to develop activities in specific countries, notably China (Third International Conference on Reproductive Immunology 2013 Shanghai, September 2013, organised by DaJin Li). Reproductive immunologists in Australia are looking forward to hosting a satellite meeting on the Immunology of Reproductive Health and Disease in association with the 2016 ICI, in Melbourne.

Website

A new website was activated in February 2011 due to the effort of Satish Gupta (India). The website is now an effective forum for dissemination of information and communication between ISIR members, and with access to 'PayPal' is facilitating payment of membership fees. The website will undergo further remodelling to ensure an emphasis on attracting new members and raising awareness about our field.

General Comments

The field of reproductive immunology is central to major important areas of human health burden and continues to expand its influence on mainstream research and practise in reproductive biology and reproductive medicine, obstetrics and gynaecology, fetal origins of disease after birth, and mucosal immunology and infectious disease. The paramount knowledge gap concerns the balance of pro-and anti-inflammatory forces in the immune adaptations required to sustain gamete development, conception and pregnancy, and how this capability in turn affects fetal development, as well as the host response to other infectious and non-infectious challenges in reproductive tissues. Thus a central focus is to unravel the complexity of immune tolerance in pregnancy, specifically the integrated role of cytokine networks, Treg cells, inflammation and Toll-like receptor signalling.

Considering the major health burden attributable to maternal-fetal conditions, it is essential to define how disturbances in immune networks cause infertility, miscarriage, preeclampsia, preterm birth, and peri-natal and post-natal disorders. An emerging area is the immune contribution in reproductive origins of child health – that is, how inflammatory disturbances in the maternal-fetal immune relationship can 'program' development of diseases in children including asthma and allergy, metabolic disorders, cognitive impairment and even schizophrenia.

There is expanding research effort and interest in reproductive tract mucosal immunity for STDs particularly HIV, and interaction of the reproductive system with other immune events including infection and inflammation, autoimmunity and cancer. Mainstream immunologists focussed on understanding the origins of non-communicable diseases are gaining interest in their reproductive and pre-natal origins, with (for example) the WUN-International Inflammation Network identifying early effects as paramount. Additionally, key reproductive biology and medicine societies regularly include sessions on immunology in their annual meetings and journals with, for example, symposia in the immunology of reproduction held annually at the US Society for the Study of Reproduction.

The ISIR is in good hands and is thriving in its mission to increase knowledge and recognition of the significance of immunology for reproductive biology and medicine, and sexual and family health.

Sarah A. Robertson and Julia Szekeres-Bartho
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