

Report on the 17th International Summer School in Busselton, Western Australia, Australia.

The 17th International Summer School (ISS) was held from November 8th to 11th in the beautiful south west region of Western Australia in the town of Busselton, 2.5 hours from Perth on the west coast of Australia.

The aim of the summer school is to promote the field of immunogenetics through an intensive comprehensive course covering a broad range of related topics in immunology, genetics, histocompatibility and transplantation. It is aimed to inspire the next generation of scientists and laboratory directors, give an opportunity to students to present their research or expand on their understanding of histocompatibility and immunogenetics, I am extremely proud of what we achieved together to ensure the success of the 17th ISS.

The summer school brought together 26 students from all over the world including Australia, Thailand, Korea, India, United Kingdom, Germany, Canada, United Arab Emirates, New Zealand, Sweden and the Netherlands. The faculty provided by the four societies included Dr Robert Liwski and Dr Annette Jackson (ASHI), Dr Anne-Margaret Little and Dr Deborah Sage (EFI), Dr Ilias Doxiadis and Dr Hatim Alabbas Mostafa (ARSHI), Mary Diviney and Dr Duangtawan Thammanichanond (APHIA). We were also fortunate to have Professor Jill Hollenbach, Professor Stefanie Gras and Assoc Professor Lloyd D'Orsogna who also contributed to presentations and discussions.



The 17th International Summer School was organised by APHIA and funding provided by each of the four societies APHIA, ASHI, EFI and ARSHI. Sponsorship was also provided by The Terasaki Innovation Centre supporting the Paul I.Terasaki Antibody Session at the 17th ISS.

The success of the 17th ISS is owed to contributions from the local organising committee, ASN conference organisers and the faculty of ASHI, EFI, ARSHI and APHIA.

The 17th ISS started with the welcome function at the summer school venue, the Abbey Beach Resort. Students and faculty were welcomed to country by local aboriginal representatives followed by the opportunity to meet and get to know each other over dinner.

The first day of the 17th ISS started with lectures on HLA genes and antigens their function and inheritance, antigen presentation, MHC evolution, HLA typing techniques, HLA antibody testing, CDC and flow crossmatching and HLA and transfusion. Students presented in the areas of HLA typing, HLA and transplantation and transfusion. In addition, for the first time a series of case studies were included in the program which stimulated several discussions around the practical aspects in the Histocompatibility & Immunogenetics laboratory.

The day come to end with a walk along the Busselton Jetty and dinner at the Shelter Brewery Co.



The following day started with lectures on HLA and disease, HLA and autoimmunity, HLA and infection (thanks to Prof Jill for last minute addition to program), Haematopoietic Cell Transplantation HCT) and NK cells and KIR. Discussion around presented case studies included antibodies in kidney transplantation, HCT, virtual and flow crossmatching along with more wonderful presentations from students. There was a break from lectures with an organised guided tour of the Jewel Cave in Margaret River. The Jewel cave is the largest

show cave in Western Australia with three immense chambers. The first chamber is home to one of the longest straw stalactites found in any tourist cave in Australia. The day ended with an Aussie BBQ under the south west sky.

The final day of the summer school continued with faculty presentations on HLA and COVID, HLA and Drug Hypersensitivity, how we can optimise HLA antibody testing by refining data analysis, importance of quality control in the H&I laboratory and finally artificial intelligence in H&I. Student presentations and case studies completed a very busy and intensive summer school. The summer school concluded with a lunch farewell at Eagle Bay Brewery before the bus trip back to Perth for APHIA or journey back home.

I have experienced firsthand as a student, faculty and now as chair of the international summer school what opportunities come from attending an international summer school. This meeting brings together experts, and young scientists and lab directors, in the field of H&I, in a unique intimate environment that allows sharing of knowledge and ideas.

We now look to the 18th ISS to be held in Mexico by ASHI, I would encourage all young scientists and laboratory directors to attend!

Dr Dianne De Santis
Chair 17th International Summer School