Editorial

Translational Immunology in Asia Oceania

The Federation of the Immunological Societies of Asia Oceania (FIMSA) was established in 1992, primarily through the efforts of the Indian Immunology Society (in particular Drs G.P. Talwar and Narinder Mehra). This nonprofit scientific organization has grown over the years and currently has 12 immunology societies as its full members (Australia, New Zealand, Japan, Korea, Thailand, Hong Kong, Singapore, Taiwan, China, Papua New Guinea, Iran and India) and a few others as associate members. FIMSA is among the four major Federations of the International Union of Immunological Societies (IUIS), the others being Latin American Association of Immunology (ALAI: Association Latino americana de Inmunologia), European Federation of Immunological Societies (EFIS) and the Federation of African Immunological Societies (FAIS). These Federations have played key role in promoting the subject of Immunology through their scientific activities at the regional as well as at global level.

The 5th Congress of FIMSA was held in New Delhi from March 14-17, 2012. The central theme of the Congress was "Translational Immunology in Health and Disease" with major focus on applied research and accordingly the talks and sessions were broadly modeled on bench-to-clinic theme. After the successful 10th International Congress of Immunology in New Delhi in 1998, this meeting offered us an opportunity for hosting an international event in Immunology, after a gap of nearly 15 years. Therefore, it was exciting and challenging for us to make it an intellectually stimulative and academically educative forum. Thankfully all went fine and as per our plans the Congress provided an intense and thorough exposure and update to basic immunology, autoimmunity, infectious disease immunology, cancer immunology and vaccine development and monitoring strategies. The Congress was attended by over 600

participants representing 31 countries, with most from the various States of India. Besides eminent speakers, chairpersons and renowned scientists, a good strength of Ph.D students, postdoctoral fellows and young scientists actively participated in the Congress. Special efforts were made to encourage participation of young immunologists by keeping low registration rates and providing them with liberal bursary support. Indeed, the Congress provided an excellent platform for competitive science and healthy discussions.

The Congress was officially inaugurated by Sir Gustav Nossal (University of Melbourne, Australia), together with other dignitaries that included Stefan Kaufmann, President of IUIS (Germany), Nicholas King, FIMSA President (Australia), G.P. Talwar (India), Jacob Natwig (Norway), Congress President Narinder Mehra (India), Vishwa Mohan Katoch, Secretary, Department of Health Research and Director-General of Indian Council of Medical Research, and Pawan Sharma, President of Indian Immunology Society. Sir Gustav Nossal delivered the keynote address highlighting the development status of various vaccines and advocated the creation of a global fund for vaccine research for three major killers namely AIDS, tuberculosis and malaria.

An international Scientific Advisory Committee helped to ensure a highly interactive, scientifically stimulative and intense programme for the congress with Dr Nirmal Kumar Ganguly as the Chair. Briefly, the scientific programme included 10 master lectures, nine theme based symposia with 54 speakers, six parallel workshop sessions including 65 oral presentations selected from over 400 submitted abstracts (on the basis of scientific merit) and two dedicated e-poster review sessions. Six best posters (two for each day) were awarded a cash prize and certificates. These awards were made available through a funding from 'International Immunology' (facilitated by Editor-inchief, Tadamitsu Kishimoto), which is published by Oxford University Press, on behalf of the Japanese Society for Immunology. Further, the lunch hours were utilized for 'Technology update sessions' showcased by high end companies through their lead speakers. Another important feature of the programme that was introduced for the first time was a special session 'Ten best oral presentations' for which the participants were selected on scientific merit of their submitted abstracts. The best three among these were adjudged by a panel of judges and were awarded certificates and a prize of US\$ 500 each, made available by the Annals of the New York Academy of Sciences.

An important highlight of the Congress was the Round Table discussion session on 'Gender equality and career development'. It may be mentioned that the IUIS has recently formed a 'Career Development Committee' with Olivera Finn (University of Philadelphia, USA) and Narinder Mehra (AIIMS, New Delhi) as Co-Chairs. The global scenario with particular reference to limited opportunities for women scientists was dealt in great details.

The Congress format included two master lectures in the morning everyday as well as two in the evening on February 16-17. These were delivered by eminent researchers viz. Abul Abbas (USA), James Mc Cluskey (Australia), Rafi Ahmed (USA), Stefan Kaufmann (Germany), Narinder Mehra (India), Shigeo Koyasu (Japan), G. P. Talwar (India), Vijay Kuchroo (USA), Xeautao Cao (China) and Reinhold Schimdt (Germany). The morning master lectures were followed by theme based symposia that covered a wide variety of topics. These included immune regulatory networks, host pathogen interaction, regulatory T cells, cytokine and inflammation, tumour and transplant immunology, adjuvants and vaccines, autoimmunity: emerging concepts, immune mechanisms underlying infectious diseases, Immunodeficiencies and HIV and cell therapy: DCs, stem cells and NKT cells. Further, new insights into emerging therapeutics, cross-talk between innate and adaptive immunity, autoimmunity, diagnostics and cell therapy, immune mechanisms underlying infectious diseases, immunodeficiencies and mucosal immunology comprised other major topics that were covered during the Congress. These symposia were followed by workshops and poster viewing sessions based on the theme based symposia.

Although, it is beyond the scope of this editorial to discuss the scientific contents of the master lectures,

theme based symposia and workshops together, this special issue of the Indian Journal of Medical Research (IJMR) is an effort to acknowledge these contributions about recent advances in the area of basic immunology and its translational applications that have revolutionized developments in contemporary medicine and biology. Broadly, the articles in this issue have been divided into major themes that include, Immune regulation: regulatory T cells, cytokines and inflammation; Host-pathogen interactions; Autoimmunity; and Immunotherapy, adjuvants and vaccines. These cover a range of new developments in various facets of Immunology providing the reader an opportunity to update new advancements in this rapidly growing science. The contributors have not only included their recent data, but have also made an effort to cover the topic more comprehensively. It is apparent that much needs to be understood on immunopathological mechanisms underlying diseases like asthma, allergies, autoimmune disorders, immunodeficiencies and infections. New approaches for vaccine design need to be developed in a wide range of diseases with an immunological basis. The arena of vaccine design now includes not only prophylactic or curative vaccines but also those that can significantly delay disease progression. Further, developments in immunodiagnostics, nanotechnology, mucosal immunology, host sensitization in solid organ transplantation and issues related to allorecognition in haematopoietic stem cell transplantation are important areas that require attention of the researchers. Overall, this Congress has successfully supplemented a new wave with emphasis on 'translational medicine' whereby the knowledge generated on various aspects of immunology can be amalgamated and successfully applied for developing improved therapeutics in humans.

As 'Guest Editor' of the special issue, I take this opportunity to thank the Director General of Indian Council of Medical Research and Editor of the IJMR for agreeing to bring out this special issue focusing primarily on the translational aspects of immunology. I also thank all my colleagues who helped in making the FIMSA 2012 Congress a great success. My special thanks to all contributors of the manuscripts for the special issue and to my colleague Dr Gaurav Sharma for helping in compiling the same.

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