Celebration of World Immunology Day in India

A campaign by Indian Immunology Society

Indian Immunology Society which was established in 1972 with a WHO Workshop on Immunological techniques at All India Institute of Medical Sciences (AIIMS) New Delhi with less than 100 members enrolled initially. Currently the society has grown with a membership base of around 2000, which includes about 1200-1300 life members who are active. The President of IIS sent out a call to the members through a group mail for proposals to celebrate the world Immunology Day in the month of March, 2019 with theme to popularize the Immunology at grass-root level i.e. among school and college students. There was an overwhelming response to this call and the secretariat of IIS received 30 proposals and IIS-Executive committee decided to support all of them with a token grant. The society decided to support all and finally the World Immunology Day was celebrated on 29th April, 2019 in different Institutes all over India under the aegis of Indian Immunology Society at 29 locations (Fig.1).

The locations marked on the map in Fig. 1 show the coverage of this campaign all over India. At most of these places the program included School students of High and senior secondary level and their teachers. These students though had a basic understanding of general science and biology yet the knowledge of Immunology as a subject was scanty. The programs involved some senior Immunologists as resource persons who gave lectures and seminars on Basic Immunology and our Immune system. Children were introduced with the applications of Immunology in clinical medicine like vaccines and immunotherapy. It was most exciting when children participated in the ‘on-the-spot’ Extempore stage presentations, poster making and quiz competitions. More than 5000 school students
got sensitized the field of Immunology and its benefits, especially in immunotherapy of cancer and other diseases (Fig.2).

At many locations, the resource persons visited different schools and gave sensitization talks and even demonstrated some basic Immunological techniques like ‘testing of Blood group’. This way they could relate the presence of antigenic molecules on the Red Blood cells and ‘antibodies’ circulating in the serum of another person (Fig.3).

Some institutes organized Lectures on advancements in some specific areas of Immunology and the audience included college students at master’s level. This campaign was helpful in generating the interest among these students to take up Immunology as their choice of subject during future science career. Brief report from few of them institutes those who celebrated WID is mentioned as below.

1. **WID Celebration at Madurai Kamaraj University, Madurai, Tamil Nadu (state):**

On the occasion of World Immunology Day on April 29, 2019, a program aimed at inculcating interest in Immunology among school students was conducted at School of Biotechnology, Madurai Kamaraj University, Madurai. The program was organized by School of Biotechnology & School of Biological Sciences, MKU. Around 80 enthusiastic participants from various schools like P.U.M.S. (Madurai), Eden Science Club (Madurai), Palkalai Nagar Middle School, Akshara Mat. H.S. School, Mahatma Mont. H.S. School, S.B.O.A. Mat. H.S. School, Pallotti Higher Sec. School and Govt. Middle School, Madurai attended this program. Inauguration of this one day program was started with welcome address by Prof. H. Shakila and an inaugural address was delivered by Prof. M. Krishnan, Hon’ble Vice Chancellor, MKU, Madurai. Invited Chief guest Eminent Immunologist Prof. VR. Muthukkaruppan, Research Advisor, AMRF, Madurai had delivered a talk on “Evolution of concepts in Immunology-Nobel Laureates in Physiology or Medicine (Immunology)”. Similarly other
distinguished invitee has interacted with students of graduate level and research scholars regarding further advances in the field of Immunology so far. Looking to the great enthusiasm MKU organized a quiz event as well in which more than 50 students had participated. The program ended with valedictory function by Prof. V. Chinniah, the Registrar, MKU. He delivered the felicitation address and distributed the prizes and certificates to all the winners of quiz competitions. Prof. H. Shakila, Organizing secretary distributed participation certificates to all the participants. Prof. D. Ganesh, Chairperson, School of Biotechnology, MKU gave vote of thanks. Finally the program ended with National Anthem.

2. **WID celebration at Kongunadu Arts and Science College, Coimbatore, Kerala (state):**

on 29th April 2019 at conference hall, Kongunadu Arts and Science College, Coimbatore, Tamil Nadu in association with Indian Immunology Society, New Delhi. The programme was attended by more than 50 students from various schools in and around Coimbatore. Dr. Lekeshmanaswamy, Head, Department of Zoology, KASC welcomed the gathering and Dr. C. A. Vasuki, Secretary and Director presided over the event. Dr. Balasubramaniam, Principal of the college inaugurated the event and highlighted the importance of immunology in today’s world and said that our college is delighted to be part of immunology day celebration. The guest of honour Dr. Ramaprabhahari, Consultant haematologist/ Haemato-Oncologist, Kovai medical centre and Hospital presented the themes featured in the technical sessions were “Importance of Vaccines” and Amazing immune system – How it protects our body”. Different activities were conducted among the students like Quiz, Essay competition & painting as well. in which the theme was Impact of Immunology on Human Welfare and Importance of Vaccination respectively. Finally the event was concluded by Dr. S. Manivannan, Organizing Secretary by giving vote of thanks to all the attendees and delegates those who attended the programme.

3. **WID Celebration at JSS - AHER, Mysuru, Karnataka (state):**

To mark the International Day of Immunology - 2019, Division of Biotechnology & Bioinformatics, Department of Water & Health – Faculty of Life Sciences (DW & H - FLS), JSS Academy of Higher Education & Research (JSS AHER), Mysuru, in association with Indian Immunological Society (IIS), All India Institute of Medical Sciences, New Delhi, had organized a day program on the theme “Immunology and Allergic Diseases” on 29th April 2019 at Seminar Hall, D&W – FLS, JSS AHER, Mysuru between 10.30 AM to 5.15 PM. The program began by invocation, and pursued by welcoming the Guests by Dr. Gopenath T S, Associate Prof., Division of Biotechnology & Bioinformatics, DW & H - FLS. Later, the importance of International Day of Immunology - 2019 was briefed by Dr. M N Kiran Kumar, Assistant Prof., Division of Biotechnology & Bioinformatics, DW & H – FLS, followed by felicitation to the invited special guests, which was organized by Dr. Chandan S and Dr. Ramith Ramu, Division of Biotechnology & Bioinformatics, DW & H - FLS, JSS AHER. The program would not have been accomplished without the student’s participation, wherein undergraduate and postgraduate students of DW & H – FLS in the afternoon session, presented the E-posters on the theme “Immunology and Allergic Diseases”. All the efforts to organize the event was taken from Division of Biotechnology & Bioinformatics, DW & H – FLS, JSS AHER, Mysuru. The
celebration day was concluded by prize distribution to the awardees, followed by concluding remarks from the Head, Dr. Raveesha K A, DW & H – FLS & Dr.Kiran Kimar, Organizing Secretary.

4. **WID celebration at Cancer Institute (WIA), Chennai, Tamil Nadu (state):**
The International Day of Immunology (DOI) was celebrated on 29th April 2019, at the Department of Molecular Oncology, Cancer Institute (WIA) through a series of lectures under the theme “Molecular Immunology - Myeloid malignancies and Mouse models”, organized by Dr. Mayil vahanan Bose and Dr. Priya Ramanathan. The programme was started with the invocation song of Cancer Institute (WIA). Dr. Priya Ramanathan welcomed the participants and delivered the first lecture on “Molecular Immunology – the changing face of cancer therapy”. Dr. Nikita Mehra gave the next lecture on “Tumor microenvironment and immunology in plasma cell disorder”. Dr. Balaji Ramachandran concluded the series of lectures with the engaging topic “Immunology behind immunocompromised mouse models”. A quiz competition on the basics of cancer immunology was conducted in which more than 50 students had participated. Certificates were distributed to all the participants by Dr. Sabitha, senior faculty of the Department of Molecular Oncology. **Dr. Mayil vahanan Bose** gave the vote of thanks and briefed about the history and importance of celebrating International Immunology day and encouraged the participants to spread the knowledge gained to the general public.

5. **WID celebration at Institute of NephroUrology, Bangalore, Karnataka (state):**
On the account of World Immunology Day on 29th April 2019, the department of Biochemistry, Institute of Nephrourology celebrated the event by conducting competitions for the paramedical students along with an awareness talk on Immunology at the seminar hall, at Institute of NephroUrology, Bangalore. The Guest lecture was by faculty Dr. Mythri KM Associate professor of Microbiology who gave a talk on the Basics of Immunology followed by Dr. Shashikala N Assistant professor of Microbiology who spoke with emphasis on role of Immunology in diagnostics. Different activities were conducted between the students of DMLT, like poster presentation and quiz completion. The institute had arranged refreshment for all and distributed the prizes to the winners. Overall the programme was attended by the faculty of laboratory with the technicians, and staff of the lab. Students from different paramedical courses- medical lab technology, dialysis, OT technology, attended the event. The vote of thanks was given by **Dr. Kowsalya R, Organizing Secretary**.

6. **WID celebration at Maharaja Savajirao University, Vadodora, Gujrat (state):**
With support of Indian Immunology Society and Maharaja Savajirao University, Department of Microbiology & Biotechnology Center able to conduct and celebrate World Immunology Day. Invited Guest Prof. D. Nandi, Division of Biological Sciences, Indian Institute of Science, Bangalore motivated students to join the field of Immunology followed by few encouragement words by Dean, Faculty of Science, Prof. H. R. Kataria in the field of Immunology. A great lecture given by Prof. Nandi on “The Nobel Prize in 2018: T Cell Co-stimulation & Anti-tumor Therapy. Beside, that he also touched upon the career trajectory of Dr Allison In affiliation to various research institutions. It was highly encouraging and motivating for students. A second lecture was taught by Prof. Sarat Dalai, NIRMA University on “Developing Effective Vaccine by Mimicking Natural Infection”. One of our Invited special guest Dr.S.N Desai, Vice President, CPL Biologicals Private Limited has shared his view on Cancer Treatment and Immune Status. The meeting was concluded with conducting a student
level quiz competition and refreshment. Dr. Ratika Srivastava gave vote of thanks to all the participants.

7. **WID Celebration at ICMR-NIRRH, Mumbai, Maharashtra (state):**

ICMR-National Institute for Research in Reproductive Health (NIRRH) celebrated the International Immunology Day on 1st May 2018. The program was organized in NIRRH with support of Indian Immunology Society. The meeting was attended by eminent scientists from NIRRH, Dr. Jayanti Mania, Director-in-charge, ICMR-NIRRH, Dr. Shubhada Chiplunkar, President, MIG and Former Director-ACTREC, Dr. K.B. Sainis, Former Head, Department of Biochemistry, BARC, Dr. Nilima Kshirsagar, ICMR-National Chair Clinical Pharmacology, Dr. Madhu Mohanty, Scientist E, ICMR-NIV-Mumbai Unit, Dr. Vandana Pradhan, Scientist C, ICMR-NIIH, and Dr. Pramod Gupta, Scientist D, RMC, BARC. Several Ph.D. scholars and research staff of ICMR-NIRRH, ICMR-NIIH and ICMR-NIV-Mumbai Unit along with PG students of Khalsa, St Xaviers, Somaiya College also attended the program. We organised a minisymposium with three lectures on the theme, “Pattern Recognition Receptors- Taking a ‘Toll’ on Cancer”. Dr. Kumar Prabhash, Professor and Medical Oncologist, from Tata Memorial Hospital, gave a lecture entitled, ‘Immunotherapy in Oncology’. The lectures were followed by High Tea. A quiz contest named “Onco-Immunologicca” was conducted by PhD scholars among the participants. The program was well organized and was enjoyed by all. Dr. Taruna Madan concluded the meeting with giving vote of thanks to all the delegates and participants.

8. **WID Celebration at PGIMS, Rohtak, Haryana (state):**

International Immunology Day was celebrated in the Post Graduate Institute of Medical Sciences and University of Health Sciences, Rohtak. A function was jointly organized by the Departments of Biotechnology & Molecular Medicine and Immunohematology and Blood transfusion. As an outreach activity of the Department an intensive and interactive workshop on “Know your blood group” was organized at Kendriya Vidyalaya Rohtak where immunology of blood grouping was demonstrated live to the school students from class 10th to 12th. A lecture on “Immunology- Advances and Prospects” was delivered by Dr. Himanshu Raikwar. Using beautiful illustrations Dr. Raikwar explained the intricacy of the immune system and elaborated in detail the functions that immune cells perform to save the body from infections. Dr. D.R. Arora, Ex. Professor and Head, Department of Microbiology, PGIMS graced the occasion as Chief Guest who gave an outline of the body’s defense mechanism. Dr. Dhara B. Dhaulakhandi, Head Department of Biotechnology & Molecular Medicine in his opening remarks said that World Immunology Day is being celebrated with the theme ‘Cancer Checkpoint Blockade’ worldwide under the aegis of “International Union of Immunology Societies” and in India the campaign is being led by the Indian Immunology Society. All participants were given certificates for their enthusiastic participation. At the end, Organizing Secretary, Dr. Himanshu Raikwar & Shri Harish Goel, Biology Teacher presented the vote of thanks and thanked all whoever had contributed in successfully organizing the event.

9. **WID Celebration at PGIMER Chandigarh, Union Territory:**

World Immunology day which falls on 29th of April every year, was celebrated in PGIMER by the department of Immunopathology. The program was attended by more than 600 students of secondary and senior secondary level pursuing 10th, 11th and 12th in science and biology in various Government
schools under the Education Department of Chandigarh Administration. The program which was conducted under the aegis of Indian Immunology Society was inaugurated by Professor Arvind Rajwanshi, Dean PGI included lectures on ‘Immune system: How it protects our body from diseases’ by Prof. Sunil K Arora and ‘Our amazing immune system’ by Prof. Ranjana Minz. The students were also conveyed the importance of voluntary organ donation through a demonstration talk by consultant in ROTTO program in PGI. This program was followed by a hands-on workshop on HLA typing & cross-match for tissue & stem cell transplantation and Immune-cell monitoring by flowcytometry and a Symposium on Transplant & Cancer Immunology on 30th April 2019. Many experts like Prof N K Mehra, Former Dean-Research, AIIMS, New Delhi; Prof. Joshy Jacob from Emory University, Atlanta, USA; Prof. Gaurisankar Sa from Bose Institute, Kolkata and Dr. Amit Awasthi from Translational Health Science and Technology Institute, Faridabad including the clinical experts from PGI were invited as faculty for this symposium who delivered lectures on advances in the field of Tissue transplantation and prospects of immunotherapy against cancer. Prof. Sunil Arora, President of Indian Immunology Society, who had explained the theme of this year WID celebrations was carefully chosen to introduce the subject of Immunology to the school students and bring awareness about the role of immune system in protection from various diseases including infections and cancer to public in general.

10. WID celebration at Central University of Punjab, Bathinda, Punjab (State):

To spread awareness regarding benefits of immunity in day to day life, Central University of Punjab, Department of Biochemistry and Microbial Sciences organised one-day Seminar-cumworkshop on World Immunology Day under the aegis of Indian Immunology Society. The theme of seminar was “Why is Immune System worth Studying”. Vice Chancellor Prof R K Kohli presided over this seminar. The special guest of this event was Prof. Gitanjalai Goyal, HOD Department of Biochemistry from Guru Gobind Singh Medical College and Hospital, Faridkot. Students and teachers from Meritorious School, bathinda along with CUPB faculty and staff participated in this event. The students from the Meritorious school bathinda, XIIth standard biology students and university students gained insight into different aspects of Immunology as a scientific field in lecture and interactive sessions. A series of two lectures touching on basics and applied aspects of Immunology was taken by Prof. Gitanjali Goyal and Dr. Manju Jain. Interesting sessions of the day comprised open session wherein school students expressed their views on the subject followed by an interactive session with Masters and PhD students of the department sharing their perspective on daily implication of immunity in day to day life and career prospective in the field at one on one level. All the participants really enjoyed the WID celebration.

Some Pictures of WID Celebration- Individually organized Institute wise

At Kongunadu Arts and Science College, Coimbatore
Inaugural Session & Candle lightening
Welcome speech & Felicitation of guests
Organizing Quiz competition
Prize distribution to the Winners

At JSS Academy of Higher Education & Research (JSS AHER), Mysuru

Inaugural session
Poster presentation session
Prize distribution to the winners
Closing remarks & Thanks giving

At Cancer Institute (WIA), Chennai
Participants of WID celebration

Inauguration & Welcome speech

Quiz competition organized among students

Prize distribution and Felicitation

At Institute of NephroUrology, Bangalore

Poster presentation by students

Painting completion on Immunology theme

At Maharaja Sayajirao University, Vadodora

Inaugural Session with Invited Guests

Participants of WID celebration
Prize & Consolation certificate distribution among participants by Chief guests.

At National Institute for Research in Reproductive Health (NIRRH), Mumbai

Welcome Session

Felicitation to all the Guests & Delegates

Participants of WID celebration at NIRRH

Quiz competition organized among participants

Prize distribution to the Winners

Organizing group for WID at NIRRH

At Post Graduate Institute of Medical Sciences, Rohtak
Inaugural Session & Participants present
Felicitations to our Chief guests & other delegates
Discussion session with students
Vote of thanks and Closing remark

At PGIMER, Chandigarh

Participants present during WID Celebration
Organizing group of WID at Chandigarh