ICMR International Travel Support for Non-ICMR Scientist

No. 3/2/TG-52(1)/HRD-2014

❖ Name & Designation
; Dr. Sabeena Sasidharan Pillai, Research Scientist II.

Address
Manipal Centre for Virus Research, Manipal University.

Name of the International Conference/ : 16th International Congress of Virology-2014.

Seminar/Symposium/ Workshop

Title of the abstract accepted : A population based study of human papilloma virus

infection among women in a rural village in South India.

❖ Date & Venue : 27th July-1st August 2014. Montreal, Canada.

❖ Money sanctioned : Rs 1,00,000/ ❖ Money reimbursed : Rs 12,012/-

Participation Report

-Organisation of training /workshops(not more than 100 words)

The Congresses of the International Union of Microbiological Socities-2014 took place from July 27th –I August 1st at the Montreal Convention Centre, Quebec, Montreal. The three Congresses were held simultaneously in one week.XIV International Congress of Mycology, XIV International Congress of Bacteriology and applied Microbiology and XVI International Congress of Virology. Emerging infectious diseases, Vaccination, Antibiotic resistance and cheating in Science were among the major topics discussed by leading Bacteriology, Virology and Mycology experts in Montreal. From more than 80 countries about 2000 participants attended the Congresses. There were Scientific sessions and Poster presentations in Bacteriolgy, Virology and Mycology.

-Academic Highlights of the training and workshops

Emerging infectious diseases and zoonoses, vaccination, antibiotic resistance and Immunology were the highlights. Oncolytic virotherapy is fast progressing and wild measles virus is being used in the treatment of lung cancers and breast cancer. The Scientific sessions on Systematic Virology, Immunology and Emerging infectious diseases by eminent virologists were very informative.

Scientific Programme was started with lectures by Prof. Julian Davies, Department of Microbiology and Immunnology, Life Sciences Institute, University of British Columbia and Julian Davies, Life Sciences Institute, UBC, Vancouver, Canada.

(1) New development presented at the Training / Workshops

A novel host restriction factor against Influenza, DDX21 Helicase was identified which is countered by viralNS1 protein. It was alarming that leprosy is reemerging in United States and there are 31 strains of leprosy bacilli exist there. It is a zoonosis and man gets the infection from armadillos. Novel approach of Oncolytic therapy using measles, vaccinia, Newcastlevirus and adenoviruses and Combination of virotherapy with chemotherapy were discussed in detail. There was a session on Environmental Surveillance against Polio from Israel. National PolioSurveillance program in Israel includes Routine Sewage surveillance using molecular methods and Acute Flaccid Paralysis Surveillance.

(2) New Development resulting from the training / Workshop (200 words)

EbolaIn the context of UN agency calls for Ebola outbreak International Health emergency researchers from Texas are trying to develop a vaccine. It has been tested in animals. The aerosol vaccine is known as HPIV₃/EboG2.

Phylogenetic and geographic relationshipsofsevere fever with thrombocytopenia syndrome virus in China, South Korea and Japan.

Severe fever with thrombocytopenia syndrome (SFTS) is a tick borne infectious disease reported in China, South Korea and Japan since 2011. Disease is characterised by fever, gasterointestinal symptoms and thrombocytopenia and has a case fatality rate of 10%. SFTS virus is a novel member of the genus Phlebovirus of the family Bunyaviridae. These ticks (Amblyomma, and Haemophysalis species) are widely reported from Japan. These ticks were reported from Malsoor, India. SFTS virus strains are clustered into either of the two clades (Chinese/Korean and Japanese) that are mostly consistent with the geographic features.

Bi-specific antibodies and anti-idiotypic antibodies in Oncolytic Virotherapy (GermanSociety of Oncology)

Bi-specific antibodies can catch the unspecific adhesion site of the virus with one arm and with the other a tumor specific epitope like PSMA or Her-2-neu. Anti-idiotypic antibodies are able to suppress the production of antiviral antibodies specifically, leaving the favorable part of the immune system intact. These approaches solve many problems in Oncolytic therapy like unspecific suppression of immune system and risk of thromboembolism and infection in the case of intra-arterial port-systems.

Scientific sessions were concluded on Ist August with closing ceremony. Programmes were chaired by Prof. Phillippe Sansonetti, InstitutPasteur, Paris, France and Pierre Talbot; Vice President International Union of Microbiological Societies. Prof. Phillippe Sansonetti briefed about Gut Microbiota:aftermetagenomics, experimentomics. Next IUMS Congress will be conducted in Singapore 2017.

(3) Name of the publication in case your work is recommended for publication-Nil

8. Participant contribution to the Training/Workshop (100 words)

Poster presentation—A population based study of Human Papilloma Virus (HPV) infection among women in a rural village in South India.

The study was planned to estimate the prevalence of HPV among women aged 18-65 years in rural India using urine samples. Perdoor village in Udupi taluk was chosen as per the advice of District Surveillance Officer. A data collection sheet including Sociodemography, and Knowledge, Attitude, Practice questionnaire was filled and early stream urine samples are collected aliquoted, and tested using PGMY09/11 and GP5+/6+primers(Nested PCR). Data was collected from 714 participants and 712 urine samples were collected. Two positive cases were detected among 135 tested samples. Virological part of the study is in progress.