

## REPORT

Report on participation of the ICMR International Fellow (ICMR-IF) in Training / Research abroad.

Name and designation of ICMR- IF	: <b>Dr. Arun Kumar Baranwal</b> <b>Professor</b>
Address	: Department of Pediatrics, PGIMER, Chandigarh.
Frontline area of research in which training/research was carried out	: Pediatric Intensive Care
Name & address of Professor and host institute	: Dr. Michael Agus, Medical Critical Care, Boston Children's Hospital, Boston, USA
Duration of fellowship	: 12 days
Highlights of work conducted	:
I. Technique/expertise acquired	: Separate sheet is enclosed
II. Research results, including any papers, III. prepared/submitted for publication	
IV. Proposed utilization of the experience in India	:

Signature of ICMR-IF

**ICMR Sanction No. INDO/FRC/452/S-24/2018-19-IHD dated 20.06.2018**

## **Highlights of the work conducted during the visit**

- Prof. Arun K. Baranwal visited Medical Surgical Intensive Care Unit (32 bed) during the first week and Medical Critical Care Unit (23 Bed) during the second week as Observer. He observed the clinical rounds, unit functioning, work culture, management of Unit, Medical and nursing management of the admitted patients.
- Bone Marrow transplant patients with sepsis with multi-organ failure were undergoing ECMO and CRRT. He observed these procedures, and learnt about the maintenance of these procedures and requirement and planning of manpower required to run these programs.
- He had meetings with Dr. Michael Agus (Consultant Pediatric Intensivist and Associate Professor, Harvard Medical School) to develop an international collaborative research project on evaluation of steroid in septic shock patients in a randomized controlled trial. They also held discussions on the possibilities of funding this research through various extramural funding agencies. They both agreed upon to communicate and collaborate on the project with aim of improving of the existing sepsis care of children in India.
- He also held meetings with Prof. Daniel Kohane (Consultant Pediatric Intensivist and Professor, Harvard Medical School) and Dr. Brian McAlvin (Consultant Pediatric Intensivist and Associate Professor, Harvard Medical School) on the possibilities of creating animal research facilities in PGIMER-Chandigarh in collaboration with Boston Children's Hospital for research on critical care issues relevant to sick children in India.
- He also visited the Clinical Simulation Laboratory of Boston Children's Hospital, Boston. It is supposed to be the best in the world and involved in simulation-based training of the medical and paramedical healthcare providers in various medical and surgical

procedures, as well as in acute care of children. They run these programs in various hospitals across the world. He had discussion with them for possible collaboration with our Institute in establishing simulation-based training infrastructure.

- He attended 25<sup>th</sup> Annual John F. Enders Lecture entitled "Targetting angiogenesis to treat cancer and intraocular vascular disorders: Lessons and future perspectives" by Dr. Napoleone Ferrara (Distinguished Professor of Pathology & Distinguished Adjunct Professor of Ophthalmology, University of California, San Diego (USA)).

**Proposed Utilization back home:**

- Improvement in the way we manage our Pediatric Intensive Care Unit especially the training and management of manpower and material.
- Improvement in the nursing care of critically ill children in Pediatric Intensive Care Unit.
- Initiation of ECMO and CRRT program in Pediatric Intensive Care Unit and the Pediatric Cardiology Unit at PGIMER-Chandigarh.
- Developing research collaborations with Boston Children's Hospital, Boston on the topics relevant to the critically ill children of our country.