

## REPORT

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

1. Name and designation of ICMR- IF : Dr. Maharshi Bhaswant Cheethirala  
(Scientist-C)
2. Address :  
Molecular Nanomedicine Research Unit,  
Sathyabama Institute of Science and Technology  
Jeppiaar Nagar, Rajiv Gandhi Salai,  
Old Mahabalipuram Road, Chennai -600019.
3. Frontline area of research in which training/research was carried out : Techniques in Cardiovascular remodeling
4. Name & address of host and institute :  
Dr. Hemant Poudyal  
Assistant Professor and Hakubi Researcher  
Center for Medical Education and Department of Diabetes,  
Endocrinology and Nutrition,  
Graduate School of Medicine, Kyoto University, Kyoto, Japan
5. Duration of fellowship with exact date : Ten months (25-12-19 to 21-10-20)
6. Highlights of work conducted
  - i) Technique/expertise acquired  
Acquired adequate skills in isolated heart preparation and millar's catheterization a gold-standard technique for measuring *ex-vivo* and *in-vivo* function of left-ventricular, in the form of stiffness constant, developed pressure, contractility, heart rate and hemodynamics measurements of cardiac hypertrophy/heart failure.
    - Expertise acquired in using Langendorff, for measuring cardiac function by suturing one end of a thread to the apex of the heart and the other end to a mechanical recording device to measure isometric contractions and isovolumic pressure along the long axis of the heart.
    - Millar pressure catheters are used for measuring arterial and ventricular blood pressures.
  - ii) Research results, including any papers, prepared/submitted for publication  
Blood pressure was significantly higher in fructose but not glucose-fed rats (Figure 1). SGLT inhibition had no effect on blood pressure in glucose-fed