c. **Statement of research achievements, if any, on which any award has already been received by the applicant. Please also upload brief citation(s) on the research work(s) for which the applicant has already received the award(s) (not to exceed 2000 words)**

Awarded at Rashtrapati Bhawan, New Delhi and Vigyan Bhawan for the development of a field based novel non-invasive procedures for Kala-azar detection in the year 2016. This work was published in the American Journal of Tropical Medicine and Hygiene in the year 2013 and can be cited as: Evaluation of rK-39 Strip Test Using Urine for Diagnosis of Visceral Leishmaniasis in an Endemic Region of India. Dharmendra Singh, **Krishna Pandey,** Vidya Nand Rabi Das, Sushmita Das, Neena Verma, Alok Ranjan, Sekhar Chandra Lal, Kamal Roshan Topno, Shubhankar Kumar Singh, Rakesh Bihari Verma, Ashish Kumar, Abul Hasan Sardar, Bidyut Purkait, Pradeep Das. Am J Trop Med Hyg. 2013 Feb 6; 88(2): 222–226. doi: 10.4269/ajtmh.2012.12-0489.

The definitive diagnosis of visceral leishmaniasis (VL) requires invasive procedures for demonstration of parasites in tissue smear or culture. These procedures need expertise and laboratory supports and cannot be performed in the field. The aim of the present study was to evaluate the existing rK-39 immunochromatographic nitrocellulose strips test (ICT) with some modification in human urine for diagnosis of VL. The test was performed on both sera and urine samples on the same 786 subjects (365 confirmed VL and 421 control subjects). The sensitivity of the rK-39 ICT in serum was 100%, whereas the specificity was 93.8%, 100%, and 96.2% in healthy controls from endemic, non-endemic, and other infectious diseases, respectively. However, in urine samples, the test showed 96.1% sensitivity and 100% specificity. Considering sensitivity and feasibility of the test in the field, rK-39 ICT using urine samples can be an alternative to conventional invasive VL diagnosis.