



ASHI MEMBER SPOTLIGHT



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How long have you been an ASHI member? 4 years

When was your first ASHI Meeting? My first ASHI meeting was in Dallas, TX in 1995 with a one-day registration to the meeting.

What made you decide to work in HLA? I learned about the HLA complex while an undergraduate student at the University of London in 1974 and did lab practicals on HLA typing by lymphocytotoxicity assay. I was also exposed to tissue typing while sharing workspace in a tissue-typing lab working for the MRC Leukemia Research Unit in London. I was working in the Clinical Laboratory of Sindh Institute of Urology and Transplantation in Karachi, Pakistan when we had a visit by the famous Professor Paul Terasaki in 1990 and a decision was made to upgrade the tissue-typing lab. At that time the lab only performed HLA-A and B typing and CDC crossmatches. Professor Terasaki offered us One Lambda HLA class I and class II plates and PRA plates at subsidized rates. This was the start of my journey in HLA typing as the Head of Pathology.

In 1994, the Institute joined the Collaborative Transplant Study at Heidelberg University with the help of Professor Gerhard Opelz. We shifted to 120 sera plates for class I and class II and PRA plates from Heidelberg. In 1994, flow crossmatch for T & B was added to the cross-matching protocol. In 1996, I was sent to Royal Free Hospital London to train for DNA typing by Dr. Zac Varghese, and the same year DNA typing was initiated for class II and later in 2013 for class I using CTS primers. Our lab added the Luminex Platform in 2012 to expand antibody testing. The culmination of the whole process was the establishment of a Department of Immunology, which was inaugurated by no other than former ASHI President, Professor Medhat Askar in 2018.

What do you find to be the most rewarding aspect of your work? The most rewarding aspect was the establishment of a Reference Tissue Typing Lab in the Institute, where doctors and technologists were trained from Nepal, Bangladesh and Sri Lanka. The lab helped initiate the transplant program in Kandy, Sri Lanka by performing tissue typing and crossmatching of samples from Sri Lanka.

The other is the development of HLA-driven Immunosuppression Protocol for living donor kidney transplantation in low-income countries. Transplants with 3-6 HLA antigen match are

given generic cyclosporine, azathioprine, and steroids while 0-2 HLA antigen match are given generic tacrolimus, mycophenolate mofetil, and steroids with 5-day induction of ATG. The Collaborative Transplant Study reported comparable 1- and 5-year graft survival rates between our institute and Europe.

The best part of my HLA career was a publication with Professor Paul Terasaki in Clinical Transplants in 2006. The title of the paper was "*Non-HLA antibodies after rejection of HLA Identical Kidney Transplants*", by M. N. Zafar, P. I. Terasaki, S. A. A. Naqvi, and S. A. H. Rizvi.

Fun fact: In 2005, Professor Paul Terasaki visited our lab while attending a conference at the institute. He saw that we were using a fluorescent microscope for CDC crossmatch and the Eosin dye extrusion technique rather than Acridine orange and Ethidium Bromide. Politely, he asked our Director Professor Adib Rizvi the reason for this. There was a big laughter by Professor Rizvi when he told Professor Paul Terasaki that the head of the lab had partial color blindness and cannot see orange color in the fluorescent microscope. I can see dead red cells in the Eosin method but not the dead cells in the fluorescent technique. The lab continues to use Eosin dye extrusion. Having said that, my hobby is painting. I paint my eyes in different colors giving this a unique painting style.

