Professor Tarv Dhanjal
Consultant Cardiologist

I trained in all aspects of cardiac arrhythmia management. My specialist interest is ablation of complex arrhythmias especially atrial fibrillation and life-threatening ventricular tachycardia. I qualified with first class honours from Birmingham University Medical School in 2000 and was awarded a British Heart Foundation Research Fellowship in 2003 resulting in PhD from Birmingham University in 2007. I was awarded a clinical training and research position at St Thomas' Hospital, London where I completed sub-speciality training in heart rhythm treatment.

I lead the Ventricular Tachycardia Research Group which comprises 3 arms of research activity as below. These arms of activity involve close local University collaborations as well as national and international links which I have developed over the past decade of research activity.

1. Clinical Outcomes Research

The UHCW VT ablation service has gained national and international recognition with all patients enrolled into prospective follow-up studies. The clinical outcomes research focuses on understanding and improving electrophysiological-based outcomes and long-term clinical outcomes. More recently the group has expanded to investigate psychosocial morbidity and well-being from various cardiac interventions.

2. New Technology Appraisal

The VT Research Group has close industry collaborations. A key group focus is understanding and improving high density mapping and work with Abbott Medical has highlighted both electrophysiological and long-term benefits of the HDGRID high density mapping catheter which have been reported in the OMNIMAPPING and the IMPACT-VT studies. Further work in this field with the award of the ENSITE X mapping system (August 2021) will enable research into improved algorithms and increased mapping vector capability. I am a national trainer and advisor for Abbott Medical and the UK Chief Investigator for the Medtronic DiamondTemp™ Ablation System Registry. Built with a network of industrial diamonds our group has performed the first feasibility study of DiamondTemp™ VT ablation and are performing a RCT comparing DiamondTemp™ ablation to standard ablation.

3. Basic Science/Translational research

I have close research ties with Warwick University, Coventry University, UCL (Institute of Cardiovascular Science, UCL Dept of Cardiology, Barts Heart Centre), Centre Hospitalier Universitaire Henri Mondor (INSERM : U955), Medtronic, Inc., Minneapolis, MN, USA and Abbott. We are involved in several translational research projects; (1) investigating the molecular signatures of myofibroblasts and their connectivity with cardiomyocytes from a swine model of post-infarct ventricular tachycardia; (2) investigating the tissue effects of DiamondTemp™ ablation; (3) investigating the mechanisms of beat to beat variability of ventricular repolarisation.