Abstract Title: Personal Genomes to Populations and back - Learnings from India

Author Name: Dr Vinod Scaria, Senior Consultant

Author Institute: Vishwanath Cancer Care Foundation, Bengaluru, India.

Abstract: The last decade has seen tremendous developments in the capability to sequence genomes. This has seen the unprecedented growth of personal genomics spilling over to population-scale genome initiatives across the world which now has provided insights which can significantly add value to interpreting personal genomes. One of the areas in modern medicine that has immensely been impacted by these developments have been clinical genetics - today impacting the diagnosis and potential precise treatment of thousands of patents and families suffering from rare genetic diseases. We have over the last decade from the initial personal genomes, build GUaRDIAN, a clinical network for undiagnosed and rare diseases in India - today impacting thousands of families through genomic diagnosis. The followup initiatives as part of the IndiGen initiative for population genomics have provided insights and the much needed basal data to start implementing genomic medicine in India. This would only be possible with close collaboration and partnership towards enabling Predictive, Preventive, Precise, Personalised and Participatory Medicine.

Area of expertise: Genomics, Rare Diseases, Cancer