

DSc Acceptance 20th December 2015
King George's Medical University, Lucknow, UP

Your Excellency, the Governor of Uttar Pradesh and the Chancellor of KGMU, Rt. Hon. Sh. Akhilesh Yadav, the Chief Minister of Uttar Pradesh, Professor Ravi Kant, VC-KGMU, Members of the Faculty and Senate of KGMU, Fellow Georgians and KGMU Alumni all over the world-

It is indeed a great honour and privilege to be considered for the highest possible degree of Doctorate in Science from the alma mater. Thirty-seven years ago, on 12th August 1968, I left my hometown Moradabad and arrived in Lucknow, one of the most pleasant places in the World. I was thrilled, anxious, very worried and a bit perplexed to enter this great institution. My stay in KGMC spanning around 11 years was full of fun, frustration and fantasy. I left in 1979 with MD in Paediatrics and began my career quest abroad. It has been a really uphill journey full of opportunities and obstacles. At every stage of my career, I thought that was the final destination, but was totally wrong. There was long road ahead of me. Now I am here back again, kind of full circle, to receive the highest possible accolade that I had never envisioned or faintly imagined.

I am humbled by the fact that my knowledge and contributions to the science of (human/medical) genetics & genomics are minimum- perhaps a tiny scratch on the surface of medical science or a tiny drop in the ocean of biological & life sciences. However, I am pleased and to large extent satisfied that I had the opportunity to learn and practise medicine with the best possible tools in hand. The evidence of my simple observations on human disease variation and reflections in basic genetic terminology are presented in my collection for wider analysis and scrutiny. The title of my collection, 'the clinical and genetic heterogeneity of human disease- personal observations and interpretations' is relevant and a testament that I continue to practise medicine equipped with simple genetic tools and very basic understanding of molecular biology.

I am fortunate that I began my career in medical genetics at a time when the chromosome banding had just got established in clinical practice. This was followed

by chromosome painting (FISH), linkage analysis by DNA restriction fragments variation in highly penetrant familial disorders, new gene discoveries, advising families with specific genetic disorders by mutation testing, offering reproductive choices (prenatal diagnosis) for primary prevention of genetic disease, improved molecular understanding for human variation and disease and finally the sequencing of the human (and other) genomes.

Over the span of just over 35 years, I have witnessed and shared excitements, enthusiasms and hopes with many leading researchers, Nobel laureates, world class clinicians and finest allied health professionals, all devoted and motivated to the single purpose- advance the science of genetics and genomics for improved human health and welfare. Outcomes of extensive and intensive genomics and applied molecular biology research are evident from new powerful genomic diagnostic tools, new emerging therapies for rare single gene disorders, targeted molecular therapy and targeted clinical surveillance for early diagnosis and management in many systemic conditions.

I am a passionate advocate for raising awareness and profile for genetics/genomics in medicine. The quest of molecular understanding for the human disease will never finish as we have lot more to learn and achieve. It is my dream that the future generations of doctors and health professionals would reap rewards of basic and applied research in human (medical) genetics and genomics. With this objective in mind, in 2010, I organized and lead the 'Indo UK Genetic Education Forum'.

The era of genomics led evidence-based personalised & precision medicine has begun and will flourish. I am very fortunate to be associated with the Human Genome Organisation (International), the Human Variome Project of UNESCO and the Genomic Alliance for Global Health (GA4GH), leading scientific and professional organisations applying the science of genetics and genomics for improved global health, particularly in developing and underdeveloped countries. This mission will carry on, and I expect to remain associated with this exciting phase as long as my mental and physical faculties may permit.

I wish to conclude this presentation of my life's work with the seminal remarks of Dr. J. Craig Venter, the pioneer of the Human Genome Project, "It is my belief that the basic knowledge that we're providing to the world will have a profound impact on the human condition and the treatments for disease and our view of our place on the biological continuum."

It is my dream that one day my parent institution KGMU will be internationally renowned for cutting edge genomic and molecular based medicine. I sincerely hope that KGMU, with the help of State and Central Governments, will put its resources and utilize current skills for setting up a dedicated centre of excellence in molecular medicine- 'The Institute of Genomic and Molecular Medicine'. I offer my unreserved and unconditional full support, commitment and professional input for this noble cause.

I wish to conclude with special thanks and gratitude to my life partner dearest Anju, also a Georgian of 1971 batch, who nurtured, supported and nudged me throughout my career and allowed long career pursuits, often mindless and incomprehensible proportions. On behalf of my Family, Friends and Fellows, I gratefully accept DSc from the alma mater.

I am conscious of the fact that 'Ars Long Vita Brevis', the art is long and life is short, the famous seminal Hippocrates quote. It holds true and shall always be.

Best wishes to you all and Goodbye!

Dhavendra Kumar

Lucknow, 20th December 2015