

“TECHNOLOGY AND ETHICS IN THE ERA POST GENOMICS”

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The rapid progress of Science and Technology has brought Human Genome Project (HGP) accomplished earlier than predicted in December 2000. The mapping of genes in the genome, followed by understands the role and regulation of those genes.

Therefore, we move from Genomic Era to Post Genomic Era. The impact of understanding of the mechanism both physiological and pathological states through functional genomics has given great benefit for human being. The genomics gave genomic signature for certain disease, and proteomic signature of certain disease can be elaborated to its application from diagnosis, prognosis and development of target therapy specific to its signature. This give the best benefit for the patients, because its specific, safe and minimal side effect. In USA, personalized medicine has been approved by President of USA and congress. How about in developing countries?

Sustainable development Goals 2030 has been declared by Presidents and Leaders of 89 Countries in year 2014 (before MDG's 2015 end). SDG's target aimed to sustain the planet and the people through Synergy, ethical and strategic steps. Ethical in all aspects is the key of the success of SDG's. All the basic principle of ethics should be understood by the people in conducting their job and activities (Autonomy, beneficence, non-maleficence and justice), Besides that, every activities in their interest also have their ethical standards namely medical ethics, ethical engineering, biomedical and clinical ethics, business ethics, nanotechnology, GMO, stem cell ethics that aimed to give norm and standard for the best outcome.

In Post genomic Era, personalized medicine is considered the future of medicine. Every country should be ready to face - through active participation in contributing the genome data, transcriptome data for their community. Many interdisciplinary groups have to be active participating to achieve the target, and the most important is the Government political will to support the need

KEY WORDS : post genomic era- transcriptomic – Personalized medicine – synergy