The dawn of the personal genome era in Sri Lanka

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Launch of the Sri Lankan Personal Genome on 10 December 2010 at the Annual Scientific Sessions of the Sri Lanka Association for the Advancement of Science in Colombo, Sri Lanka. The hard disk containing the Sri Lankan Personal Genome is being handed over to the Senior Minister for Scientific Affairs Hon. Prof. Tissa Vitharana by Prof. Vajira H. W. Dissanayake, Chairperson, Specialty Board in Biomedical Informatics and Dr. Rajesh Gokhale, Director Institute of Genomics and Integrative Biology, India.

The first Sri Lankan Personal Genome was successfully sequenced by scientists and bioinformaticians from the University of Colombo, Sri Lanka and the Institute of Genomics and Integrative Biology, New Delhi, India. This project was initiated by the Specialty Board in Biomedical Informatics of the Postgraduate Institute of Medicine, University of Colombo, Sri Lanka.

In 1953 an American James Watson and an Englishman Francis Crick described the elegant structure of our genetic code, the DNA double helix[(1)]. Fifty years later the 'Human Genome Project' succeeded in describing the three billion letters that are found in our genetic code - the Human Genome[(2,3)]. The Human Genome Project was an enormous collaboration between six leading nations of the world and over 1000 of the world's best and the brightest scientists from a multitude of fields. It took 13 years and three billion dollars to complete the project. Advances in technology since then has made it possible today to sequence a Human Genome in a very short period of time, at a fraction of the cost and with minimal manpower.

The first Sri Lankan Personal Genome sequence came from a Sinhalese man with both upcountry and low country heritage. It is hoped that the project would be extended to cover other ethnicities as well in the years to come. The Biomedical Informatics group in the University of Colombo based in the Postgraduate Institute of Medicine and Human Genetics Unit of the Faculty of Medicine will continue to analyse the data generated to make sense of the vast amount of information available in the Sri Lankan Personal Genome.

A paper in this issue of the journal describes some preliminary findings from the Sri Lankan Personal Genome and the future plans of the project[(4)]. In addition the data has been made

available freely to all scientific groups in the country to analyse, explore and make their discoveries freely available to the scientific and the medical communities.

A second paper in this journal describes the Sri Lankan Genome Variation Database[5]. It is another effort of the University of Colombo, initiated this time by the Human Genetics Unit of the Faculty of Medicine and is aimed at creating an online database of genetic variations found in the Sri Lankan population. It will enhance and complement the Sri Lankan Personal Genome Project.

The Sri Lankan Personal Genome is Sri Lanka's contribution to the growing pool of scientific knowledge on genomes. With the launch of the Sri Lankan Personal Genome, genetic research in Sri Lanka has truly entered the post genomic era. Let us join hands to ensure that the scientific discoveries that we make when we analyse our genome will benefit the Sri Lankan society at large.

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Special Editorial Note

The publication of the three issues, 1, 2 and 3, of 2011 Volume 2 of The Sri Lanka Journal of Bio-Medical Informatics were inevitably delayed due to a necessary reorganisation of the basic thematic format of the Journal, following intense and comprehensive discussions the editorial authorities had with the other stakeholders of the Journal.

The Journal, from this year, will be published under four ***Predominant Themes*** which will be repeated in each Volume in turn, every year.

The ***Predominant Themes*** will be:

Issue 1: Bioinformatics
Issue 2: Public Health Informatics
Issue 3: Information Technology for Health and Medical Education
Issue 4: Telemedicine and m-Health

However, the Editorial Board wishes to reassure authors and readers that these will only be ***Predominant Themes*** and that other accepted articles outside the declared theme too will be included in these issues to minimise the turnaround time of accepted articles. It is envisaged that the total turnaround time from submission to publication would not be longer than six months.

The number of Executive Editors has been increased from two to four, so that each of them will take a thematic issue under his personal wing.

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