



## Institute Lecture

# “Globalization, Agriculture and Hunger”

**Mr. Devinder Sharma**

**Chairman**

**Forum for Biotechnology & Food Security**

**New Delhi**

*Date: Thursday, September 21, 2006 Venue: L-1, Lecture Hall Complex Time: 6:00 PM*

### Abstract

WTO (World Trade Organization) was promoted as the world's best opportunity to increase economic growth and pull millions in the developing world out of poverty and hunger. More than ten years after the WTO came into existence, as the impasse over a multi-lateral trade regime continues, the question that is being increasingly asked is: **Has the dream gone sour?** Mr. Sharma will speak on the relevance of WTO for developing countries like India. His contention is that WTO hardly offers any promise for development for developing countries and instead:

- In reality it has put millions of jobs in the manufacturing sector at risk.
- In the agricultural sector it has turned a majority of the developing countries into net food importers thereby playing havoc with food security and adding on to the global poverty and hunger.
- The trade agreements are biased towards the interests of the rich countries at the cost of the developing nations. A case in hand is that of agricultural subsidies. Trade in agriculture had so far remained embroiled in the contentious issue of subsidies -- presently computed at US \$ 1 billion a day that the 30 rich countries forming the OECD (Organization for Economic Cooperation and Development) provide to this sector. Only a minuscule component (export subsidy which constitutes less than one percent of the total subsidies) has been offered to be phased out over seven years. This still protects the monumental support provided to agriculture by the rich industrialized countries, which in turn distorts the global market in favour of the developed nations.

### About the speaker:

Mr. Devinder Sharma has been involved in research and writing on policy analysis, genetic engineering, sustainable agriculture and food security for more than 25 years. Trained as an agricultural scientist, with a Masters in Plant Breeding and Genetics, Mr. Sharma commenced his journalistic career with the Indian Express in 1981 as Agricultural Correspondent and finally quit in 1992 as the Development Correspondent. Sharma's first book 'GATT and India: The Politics of Agriculture' was published in 1994. Through his articles, published in various academic journals, national and international newspapers, magazines and electronic news portals, he has played a significant role in changing the course of the national and global debate. He has taught at several national and international universities and has educated parliamentarians on global agricultural issues.

*All are cordially invited to attend. Refreshments will be served at 5:45 PM*

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**S.C.Srivastava**

Dean of Research & Development



## Institute Lecture

# “The Genome that we do not know- Unraveling the world of Non-Coding Genes”

Professor Subhash Chandra Lakhota  
Department of Zoology and Molecular  
&  
Human Genetics,  
Banaras Hindu University  
Varanasi

**Date:** Tuesday, September 19, 2006 **Venue:** L-1, Lecture Hall Complex **Time:** 6:00 PM

### Abstract

Complete sequencing of human genome and those of many animals, plants, bacteria and viruses have made it possible to have a comprehensive understanding of the books of our secrets since if the alphabets/sequence of the genome can be readout, it should obviously be easy to understand their meaning entirely. However, this has not happened yet, partly because of our perception of “gene” as the unit of “biological information is somewhat flawed. The simplest and the commonest perception is that genes codes for proteins, which in turn control all other activities in the living system. Additionally, some genes produce special RNAs, like tRNA or rRNA. These species of RNA help convert the messenger RNA, which is produced by each gene, into a specific protein. However this perception of genes leaves a bulk of DNA (often more than 95%) in genomes of most higher organisms, including humans, without a genetic identity because these sequences neither code for proteins nor produce the other RNAs like the tRNA or rRNA etc. This paradoxical fact led to a dogma that our genomes carry a very large chunk of “junk” or “selfish” DNA. Much of the genomic analysis till now has been based on this dogma.

Is a major DNA in our genomes indeed junk? Could nature have carried a bulk of the genomes of most higher organisms as rubbish through the millions of years of evolution? Or is our perception of “junk” DNA is a fantasy shaped by our ignorance? In this talk, I would be addressing these questions and describe our new perception of “junk” DNA a fantasy shaped by our ignorance? In this talk the speaker would be addressing these questions and describe our new perception of the so-called “junk” DNA. It is notable that the appearance of the “ non-coding” DNA in the genome coincides with origin of complex multi-cellular organization from unicellular organisms. This relative amount of non-coding DNA in genomes generally corr

### About the speaker:

Kalyanmoy Deb is a Professor of Mechanical Engineering at Indian Institute of Technology Kanpur. He is the recipient of the prestigious Shanti Swarup Bhatnagar Prize in Engineering Sciences for the year 2005. He is a fellow of the Indian National Academy of Engineering (INAE), Indian National Academy of Sciences (IASc) and International Society of Genetic & Evolutionary Computation (ISGEC). He has received Fredrick Wilhelm Bessel Research Award from Alexander Von Humboldt Foundation, Germany in 200. His main research interests are in the area of optimization, optical modeling and design and evolutionary algorithms. He has written two text books on optimization and more than 160 international journal and conference research papers

*All are cordially invited to attend. Tea will be served at 5:45 PM*

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**S.C.Srivastava**  
Dean of Research & Development