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Relevant Links:

- The Human Genome A Big White Elephant
- Where Genes Fail Dietary Interventions for Alzheimer's and Parkinson's?
- The Human Genome Map, the Death of Genetic Determinism and Beyond
- GM AIDS Virus More Deadly
- Cloning and ES Cells Both Biting the Dust

ISIS Report - April 25 2001

Chief Scientist Bob May Lambastes Human Genetics Panel

Nick Papadimitriou and **Angela Ryan** report on the Welcome Trust Celebration of the Human Genome at the Royal Society 22 March.

Sir Bob May, president of the UK Royal Society, summed up the event when he rose to his feet and expressed dismay at the "First World centredness" of the dialogues. The extent to which anthropocentrism had dominated the proceedings was shocking he said. He was scathing in his criticism of the panel and said he had expected much more. He pointed out how close we are genetically to the nematode worm, reminding us of our interconnectedness to the rest of the living realm. He said we had singularly failed to grasp the most important implication of the findings of the human genome project.

This came at the end of a long foray into eugenics, genetic determinism and social engineering by Sir John Sussman of the Welcome Trust, who said the genome was like a hieroglyph and that the "gold standard" sequence would be available within 2 years. He stated there are about 10 million variations between individuals and everybody is genetically unique. The study of variations between people must be done in public and with public trust, "bit by bit". However, the genome poses many problems and there are far more questions than answers. We must share in planning around it and he strongly recommended that a universal declaration should be made over the human genome, to what end?

The question and answer session revolved around the search for the intelligence gene, longevity and the engineering of "pleasant traits". Sir Chris Evans, a venture capitalist, was careful to manoeuvre himself away from the genetic-determinist position. "What is intelligence"? Evans asked in response to a question about the intelligence gene. The truth is that anybody intent on profiting from the human genome cannot possibly take any other position at this stage.

The limitations of genetic engineering life and genetic determinism are becoming increasingly evident. Evans repeatedly gave assurances based not so much on what he wanted to say but rather on the dismal track record of the pharmaceutical companies to glean *anything* useful or meaningful from the human genome project. "It'll be ten years before anybody can do anything sensible with gene therapy," He said. But that's in the wake of a ghastly catalogue of failures rather than some well thought out caution on the part of the industry.

The audience voiced concerns about human gene patenting. Evans claimed patents taken out on human gene sequences would not stand up in court. "These patents will be challenged and there will be battlegrounds, depending on what country the patent is taken out in," he said. He assured the public that industry would probably not keep patents on human genes.

Again and again we heard the panel answer perfectly straight questions with evasions and half-truths. Sir John claimed that democracy renders the genome "safe", but how?

And what "democratic" principle has been adhered to? The public were not consulted on the human genome project. Neither were they consulted on the health policies following from it. Hundreds of millions in public money have already been spent in supporting the project, and billions more are being poured in to help a biotech industry seriously in trouble.

Publicly-funded biomedical research over the past decade has been dominated by a genetic determinist understanding of disease and the discredited doctrine of "one gene, one protein". One thing the human gene map does tell us is that there are ten time as many proteins as genes. Prime sequencer Craig Venter of Celera Genomics said, "one gene leads to many different proteins that can change dramatically once they are produced." Genetic determinism is dead. Dr Robert Beall, president of the Cystic Fibrosis Foundation told the Wall Street Journal last year, "we've had our gene since 1989 but a cure is still no closer."

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