

The digital and genomic revolution.

The sequencing of an individuals genome with haploid determination appears to pinpoint the actual bases which are at fault and thereby target the disease. Multiple alleles as in heart disease, type II diabetes, some cancers, dementias will be revealed and enable a more sophisticated preventive drug regime being implemented. I understand that it will be possible even to synthesise the required drug in the home when the base anomalies are transferred digitally by computer to your own home and this could instruct a machine to make the drug from basic ingredients. This is where Einstein's comment breaks down as I think he was referring to physics theory. In biological theory such explanations will have life-saving meanings and what can be more meaningful than that. Of course he is right in the sense that we will still be faced with all the value assessments which every decision will require and that will never be based on genetics but on the priority we give this knowledge. Thus we return to a fundamental problem the interaction of values and scientific explanations. This is seen in the dilemmas of : use of human embryos, the patenting of genome and drug information for profit, on the other hand the inhibitory effect of institutional funding as being risk averse, the problem of peer review (the prisoners running the prison as Ventner put it). Above all the budget private and state that can be spent on health problems "one could spend the whole GNP on health and still the doctors would not be satisfied".

E. Powell