

SIR WALTER BODMER - "UNDERSTANDING COMMON DISEASE"



We're finding out a huge amount about genetic differences between people, and obviously many of those differences affect susceptibility to disease. At the rare end of the scale - familial diseases - many of those have been solved in a way; we know what's going on. At the common end - common diseases, which includes cancer when it's not clearly inherited - we know much less. We're beginning to find things out, but it's going to take time to turn those findings into something we can actually apply. Genomic medicine, in that sense, in my view isn't just around the corner.

I think there are two areas where there's much more likely to be an impact. One is drug response: I think if we can find out more about the differences that influence whether or not you respond adversely to a drug, or whether or not a drug is useful to you - like a painkiller. The other difference is in my field, in cancer. Every cancer is a genetic evolution, if you will. The genetic content of that cancer influences enormously how you should be treating it and what the prognosis is. So I think the biggest impact in the near future of the sort of genetic knowledge we're getting is going to be in how we treat cancers and how we use the genetic information about the cancer to determine what we do.