

GENETICS, PHILOSOPHY

FORMAL PROOF IS DIFFICULT IF NOT IMPOSSIBLE

12.01.2010

At least in medicine but also in many other fields, formal proof of a scientific hypothesis is difficult if not impossible. Reading again Greaves' cancer book, I discover even more insights there. Talking about the hormonal stress leading to breast cancer he makes the point that

there is no 'cause' in the straightforward, singular, or usually perceived meaning of the word; no tubercle bacillus equivalent. Neither is a mutant gene the common cause. Chronic hormonal stimulation driving persistent epithelial stem cell division seems to be a major factor (cycles driving cycles) and this reflects in large measure our social divorce from evolutionary adaptations for reproduction ... Superimpose some degree of inherited predisposition and chance itself on this prescription and a very plausible causal network imbued with evolutionary principles becomes evident.

This is a very different view to the current sequencing headlines like "[Lung cancer and melanoma laid bare](#)".

CC-BY-NC Science Surf accessed 20.12.2025 