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Evolution, Physics, and Cancer: Disrupting Traditional Approaches

ROBERT AUSTIN, Princeton University

Physicists who were recruited to try and assist with the stubbornly constant mortality rates of cancer world-wide over the past 100 years have basically had the invitation withdrawn by the oncology community. The oncologists became annoyed with the independence of thought and the skepticism of some physicists with continuation of the present paradigm of the cancer genome as the rosette stone as the key to cancer. To quote a recent letter in Physics Today: "Curing cancer is a complex biological problem to be solved by biologists". Apparently our mission as minions is to be high-level technicians. But I think that is wrong and will lead to continuation of the string of failures and deceptions foisted on the public at large by the Medical Industrial Complex. I think we really need to re-think cancer as a phenomena which is driven by evolution and may be desired by the organism and be a product of both the aging of the proteome and the genome. Further, searching for mutations (The Cancer Genome) may be completely the wrong direction, searching for protected genes may be as important as looking for mutated genes. I'll try to present the case that physicists should not have been kicked out of the Medical Industrial Complex that keeps the cancer business humming and profitable.