SIR JULIAN HUXLEY LECTURE

The evolutionary origins of diversity in cancer

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6.00pm Wednesday 15 October 2014, The Linnean Society of London, Burlington House, Piccadilly, London W1J 0BF

All cancers share the common feature of being clonal expansions of mutant cells that, over years or decades, disseminate within and between tissues, hijacking essential normal functions. But cancers differ widely in their tissue of origin, underlying mutational spectra, time frame of progression, pathological impact and clinical course. The systematics or classification of cancer subtypes therefore poses a considerable challenge with biologists, histopathologists and oncologists applying differing criteria.

Over recent years, a new conceptual framework has emerged that makes biological sense of all the diversity. This views cancer as a process of somatic cell evolution driven by mutational diversification and natural selection or adaptation within the specialised ecosystem habitats of the body. The implications of this new vision for diagnosis, prognostication and control of disease are very substantial.

The meeting is open to visitors and wine will be served after the lecture to members and guests