Dr. Martin Chalfie 演講內容摘要

The Continuing Need for Useless Knowledge

In 1939, the first director of the Princeton Institute for Advanced Study Abraham Flexner wrote an article in Harper's Magazine entitled "The Usefulness of Useless Knowledge." In this article he questioned "whether our conception of what is useful may not have become too narrow to be adequate to the roaming and capricious possibilities of the human spirit," and he argued that real discoveries are made when scientists are allowed to explore the world without recourse to usefulness. Several Nobel prizes have been given for discoveries tangential to what was initially studied. I will argue that "useless knowledge" is needed as much today as in the past to improve human well-being and health. I will also suggest ways that we can encourage the finding of the unexpected, the discoveries that will enable future scientific revolutions.

持續需要無用知識

1939 年，普林斯頓高等研究所的首任所長亞伯拉罕·弗萊克斯納（Abraham Flexner）在《哈珀雜誌》上發表了一篇名為《無用知識的用處》的文章。在這篇文章中，他質疑我們對於什麼是有用的觀念是否已經變得太狹隘，以致於無法滿足人類精神的無常和流動性；他並認為當科學家被允許在不求實用性的情況下探索世界時，才會進行真正的發現。有幾個諾貝爾獎是頒發給偏離最初研究領域的發現。我將論證，為了改善人類的福祉和健康，「無用知識」在今天和過去一樣需要。我還將提出一些方法，鼓勵發現意想不到的東西，這些發現將推動未來的科學革命。