

CANCER – a personal disease that affects everyone



A talk by
Professor Gerard Evan

Cancers affect around one in three people, mostly later in life. This makes cancer a very common disease. But to the biologist, the mystery is why cancers are so rare.

Your body contains around a hundred thousand billion cells (as many cells as there are stars in a thousand galaxies, or over ten thousand times the number of people on the Earth) and any one of them could, in principle, grow into a cancer. The fact that this happens so rarely is a testament to powerful mechanisms within each of our selves that prevent them from turning cancerous. When cancers do arise, it's because of damage to the DNA of individual cells: this damage changes the DNA sequence (mutation) leading to inappropriate activation of signals for the cell to divide (accelerator stuck down) and failure of the mechanisms that prevent cancers from forming (brakes fail). Because these mutations are random, everybody's cancer is different from anybody else's. Nonetheless, most (perhaps all) cancers share certain common features that may make great targets for future cancer treatment.

Date: Saturday 18th March

Time: 11.30

Location: Library Reading Room, Hopkins Building.

More information regarding our event can be found at <http://www.bioc.cam.ac.uk/outreach>