Chromosome imaging promises breakthrough treatments

FET-Open-funded researchers are developing pioneering tools and techniques that will enable scientists to view chromosomes in unprecedented detail, greatly advancing research into life-saving treatments for cancer and cures for many genetic disorders.

Live image result

Chromavision

chromosome

Chromosomes, each containing hundreds or thousands of genes, act like a detailed instruction manual for how cells should develop and behave. The human genome is made up of 23 chromosome pairs containing more than 3 billion base pairs of DNA, but even the smallest mutation or variation in the structure of a chromosome can have an enormous impact on human development and disease.

To fully understand the range of diseases linked to errors in cell division, scientists must be able to examine in detail both healthy and diseased chromosomes. Better imaging and understanding of chromosomal mechanisms will increase knowledge of the causes of human diseases and aid drug discovery. The EICFET-Open project CHROMAVISION is addressing this challenge.

Read full article here.

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