

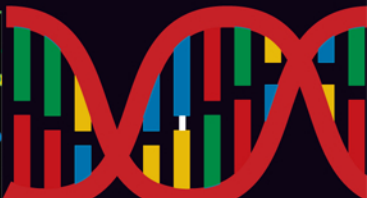
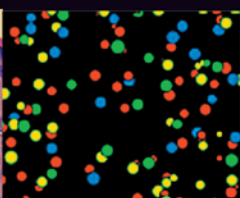
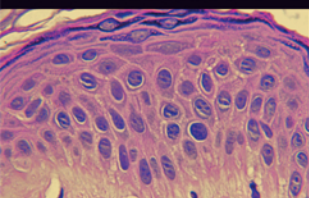
DECODING A CANCER PATIENT'S GENES

DIAGNOSIS Acute myelogenous leukemia

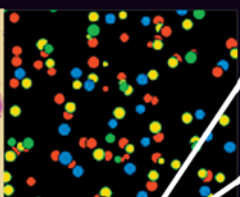
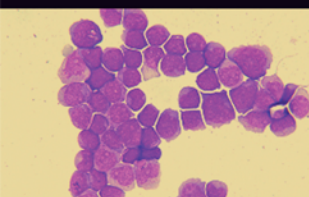
OBJECTIVE Compare the genes of cancer cells to healthy cells to better understand the differences

CHALLENGE Analyzing such massive data sets will require an innovative, strategic approach

HEALTHY CELLS



CANCER CELLS



BASE PAIR

VARIATION

3,000,000,000

The number of base pairs in the complete human genome.

2,700,000

Base pair variants that identify this person as unique.

The question is, which ones are linked to cancer?

2,640,000

Cancer cell variations that match variations also found in the patient's healthy cells.

60,000

Suspicious variations to investigate.

10

Using new tools and strategies, researchers identify 10 mutations that may have triggered the deadly cancer.