



neo hacks

GIKI EDITION

Ready. Set. Solve.

The event will begin shortly

CHALLENGE BRIEF NEOHACKS GIKI EDITION 2025

**APPROXIMATELY 9.7 MILLION PEOPLE DIE FROM CANCER EACH
YEAR WORLDWIDE (2022).**

THIS REPRESENTS NEARLY 1 IN 6 DEATHS GLOBALLY.

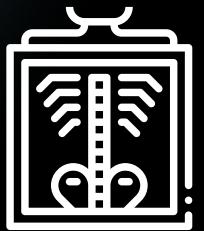
GLOBOCAN (2022)

AMONG MEN, HEAD AND NECK CANCER (HNC) RANKS AS THE FIFTH MOST COMMON CANCER OVERALL, WHILE IN WOMEN IT RANKS 12TH.

World Cancer Report (2022)

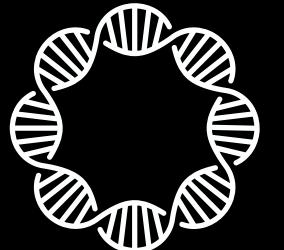
**CLASSIFY AND UNDERSTAND
CANCER WITH OMES DATA**

CLASSIFY AND UNDERSTAND CANCER WITH OMES DATA



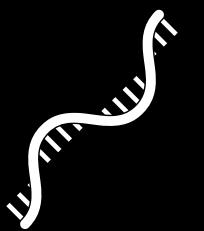
Images

H&E stained images that show what the tissue looks like [.svs files]



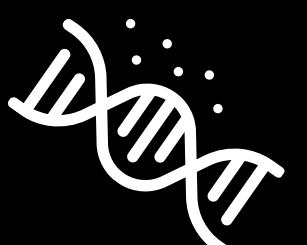
Genome

What changes (mutations) are present on which genes, and how often do they occur [.maf files]



Transcriptome

how many RNA transcripts (reads) are detected for each gene, indicating which genes are active ('on') and to what extent in a given sample. [.tsv files]



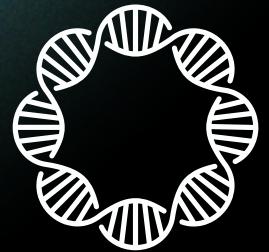
Epigenome

It shows how much each spot on the DNA is chemically tagged with methyl groups, which can turn genes off. The numbers go from 0 to 1 – higher means more tagging, and likely less gene activity. [.tsv file]

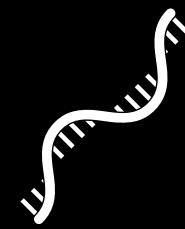
YOUR CHALLENGE



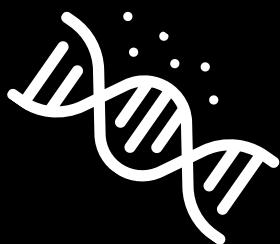
Images



Genome



Transcriptome



Epigenome

Train a model
of your choice
that

I. Classifies cancer vs
non-cancer

II. Classify stages
of cancer

III. Predict risk
factors (smoking,
alcohol, etc.)

IV. Impress us with
more!

AND YOUR TIME STARTS NOW