

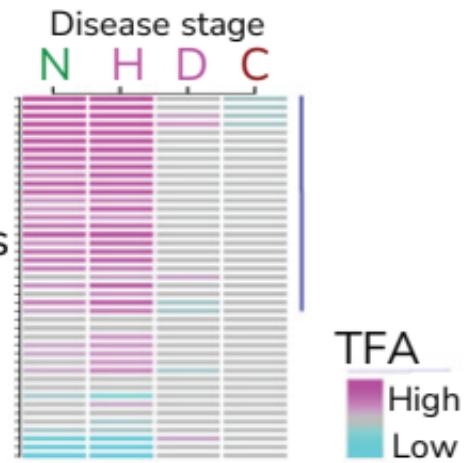
Analyze scRNA-seq
from different stages
in carcinogenesis

Normal epithelial cells (N)

Hyperplasia (H) Dysplasia (D)

Invasive cancer(C)

Estimate differentiation activity of tissue-specific TFs



Transcription factor differentiation activity (TFA) map

Compute TFs inactivation load (TFIL) of each cell

