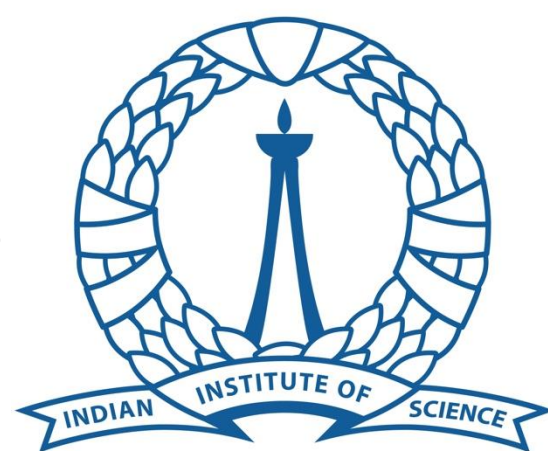


EMLab

Mechanical constraints imposed by host epithelia determine oncogenic cell fate during cancer initiation

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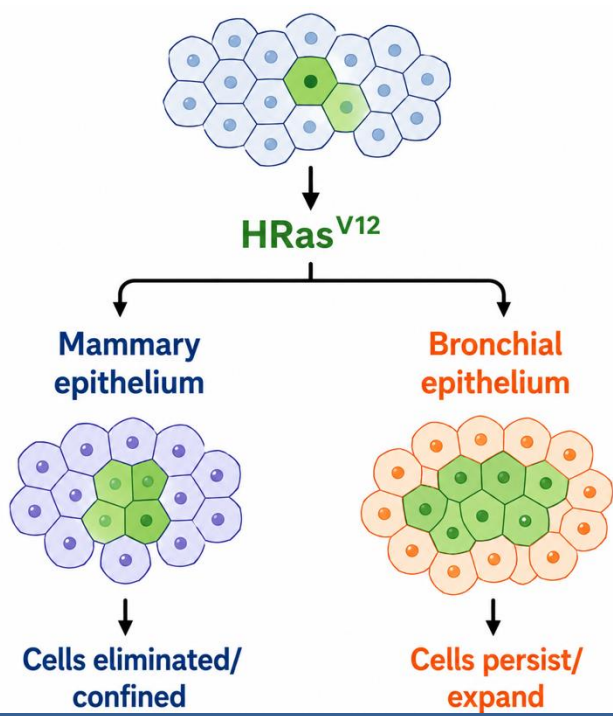


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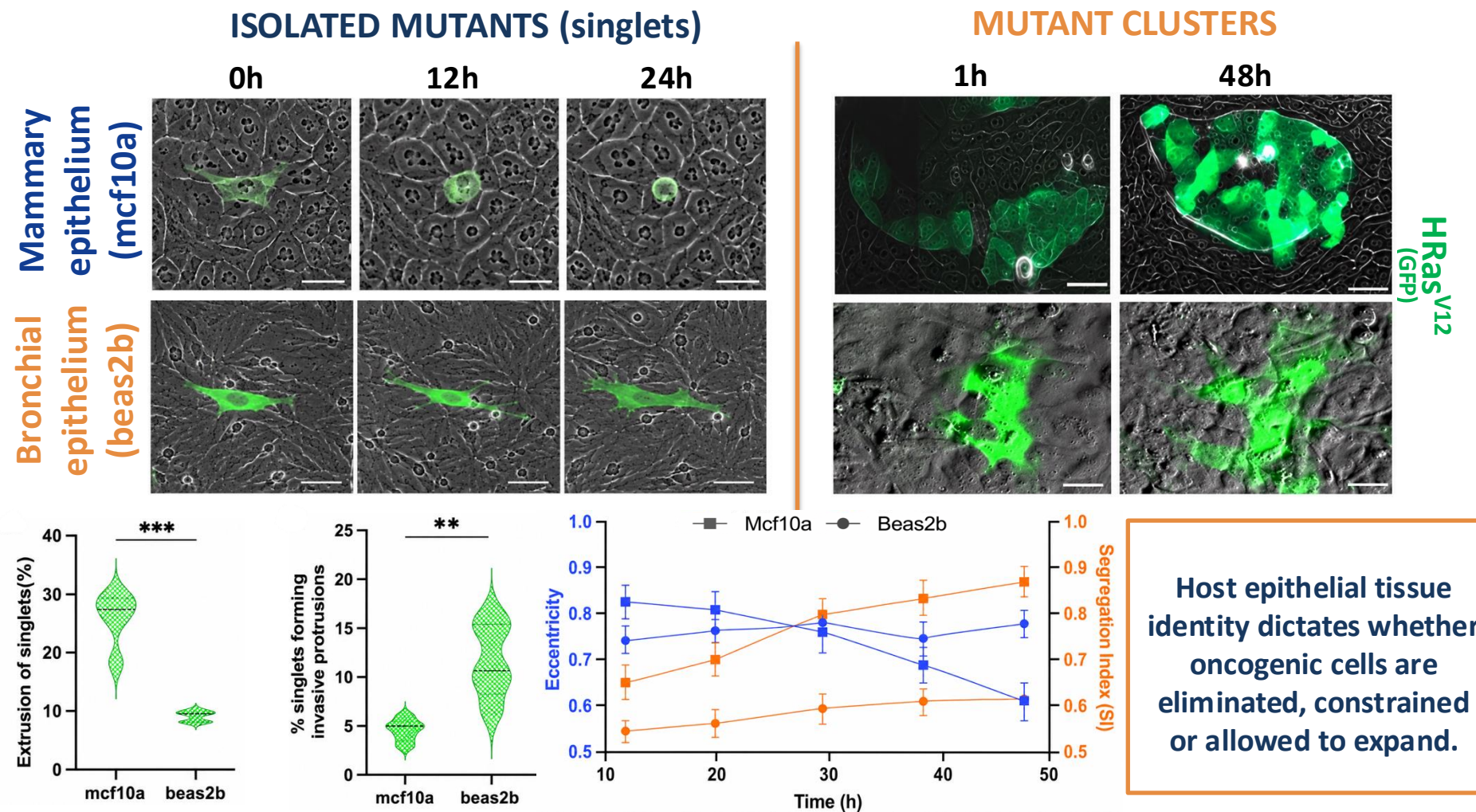
The same oncogenic mutation experiences fundamentally different fates depending on the mechanical context of host epithelia.

1. BIOLOGICAL QUESTION

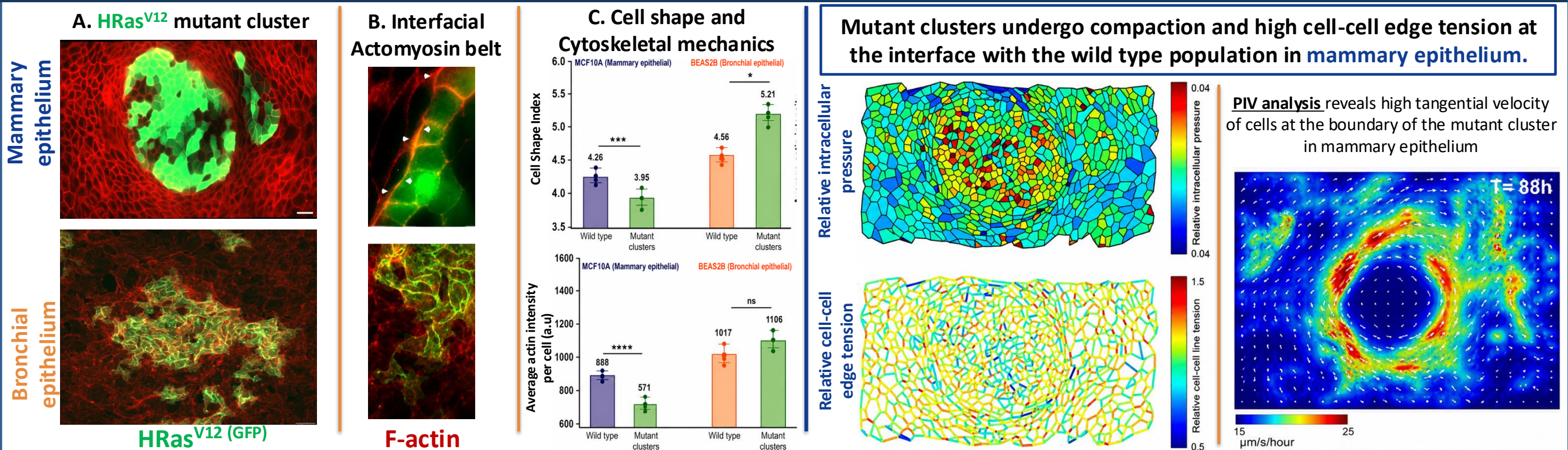
Why does the same oncogenic mutation drive tumour formation in certain epithelia but not others?



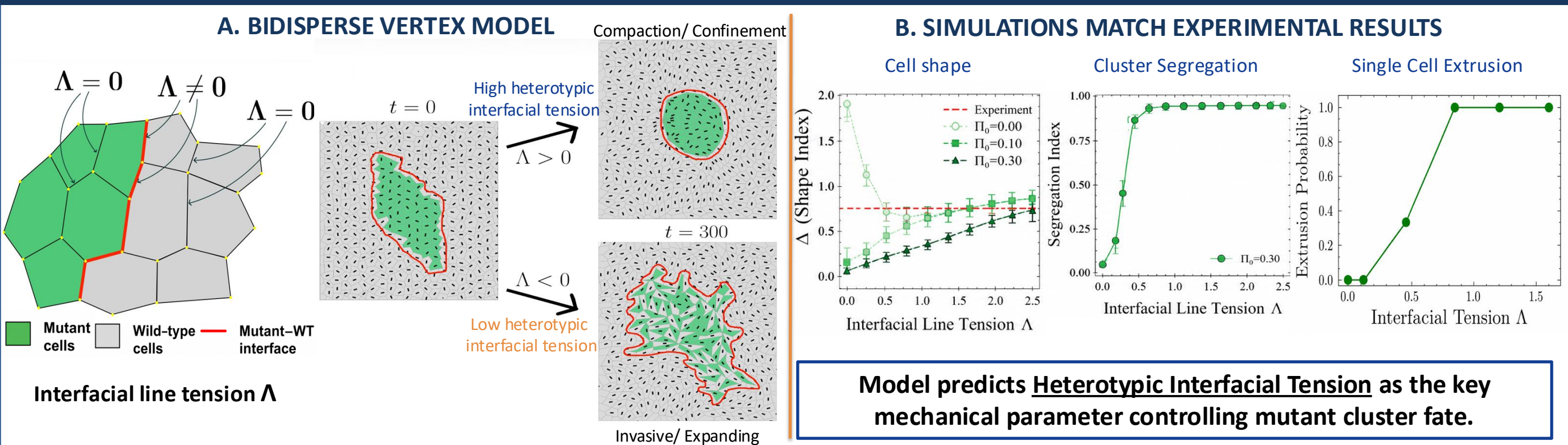
2. SAME ONCOGENE, DIFFERENT FATE



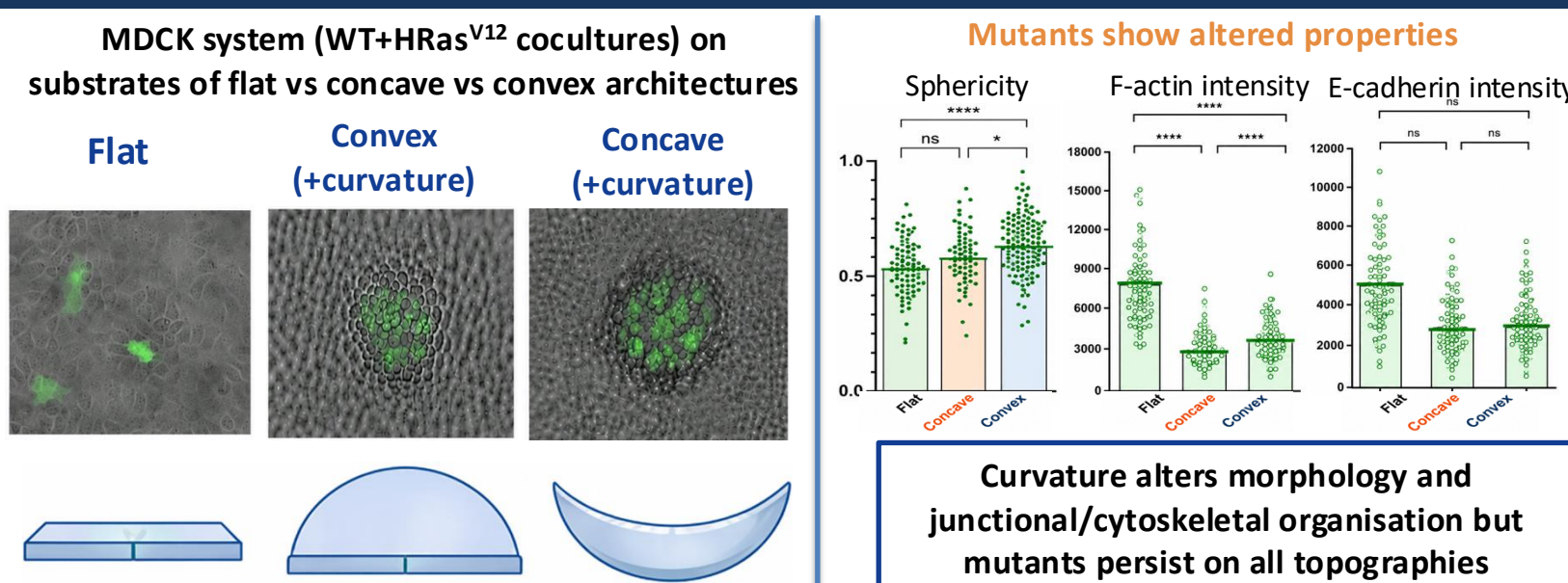
3. DISTINCT MECHANICAL SIGNATURES OF MUTANT CLUSTERS IN THE TWO TISSUES



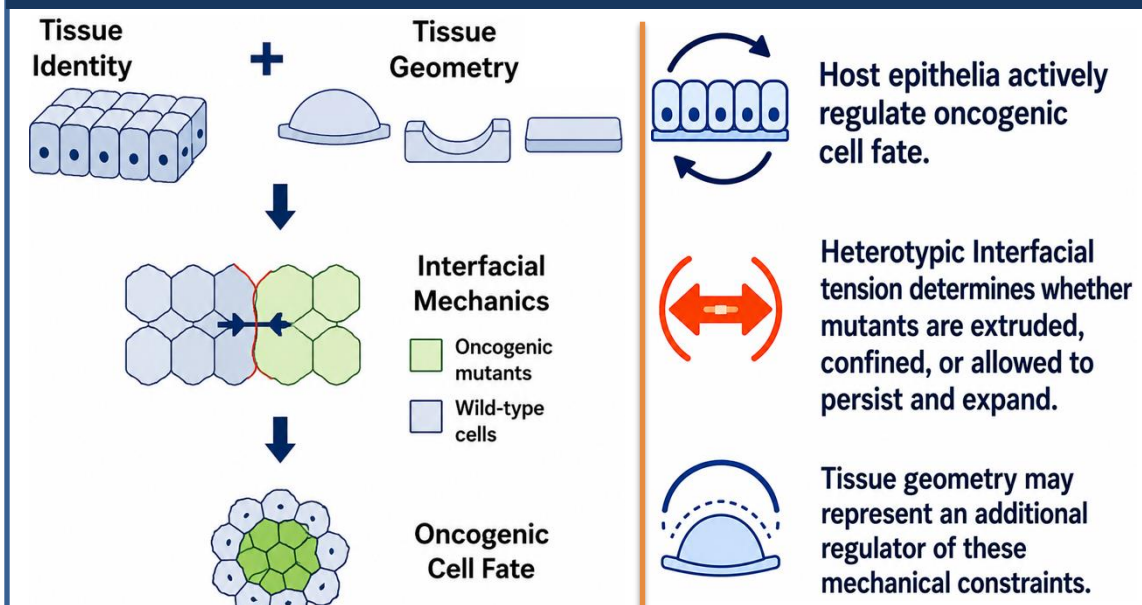
4. MECHANISTIC FRAMEWORK: HETEROZYPTIC INTERFACIAL TENSION GOVERNS MUTANT FATE



5. DOES TISSUE ARCHITECTURE MODULATE MECHANICAL CONSTRAINTS?



6. UNIFIED MODEL



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Read the paper



Meet the lab



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