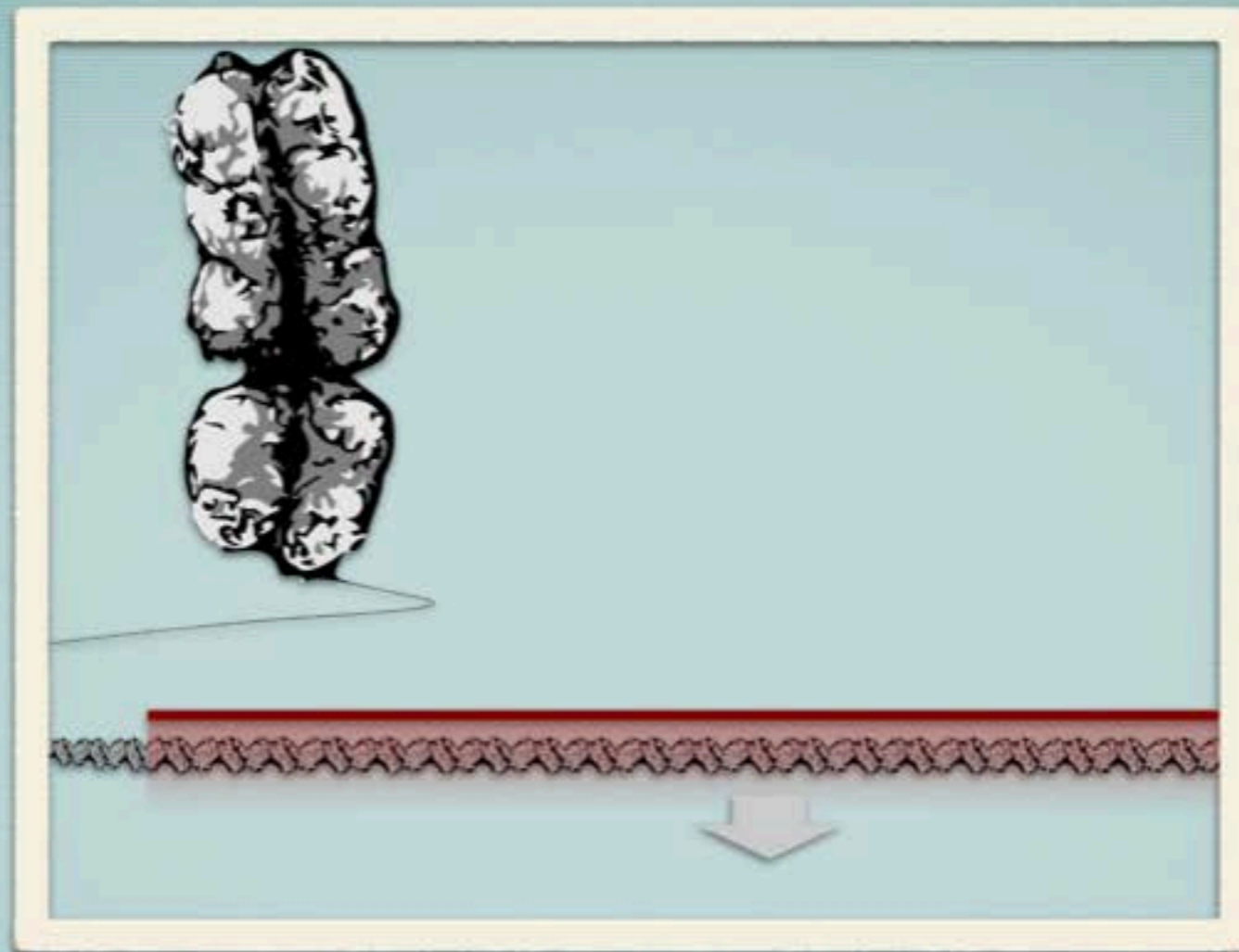


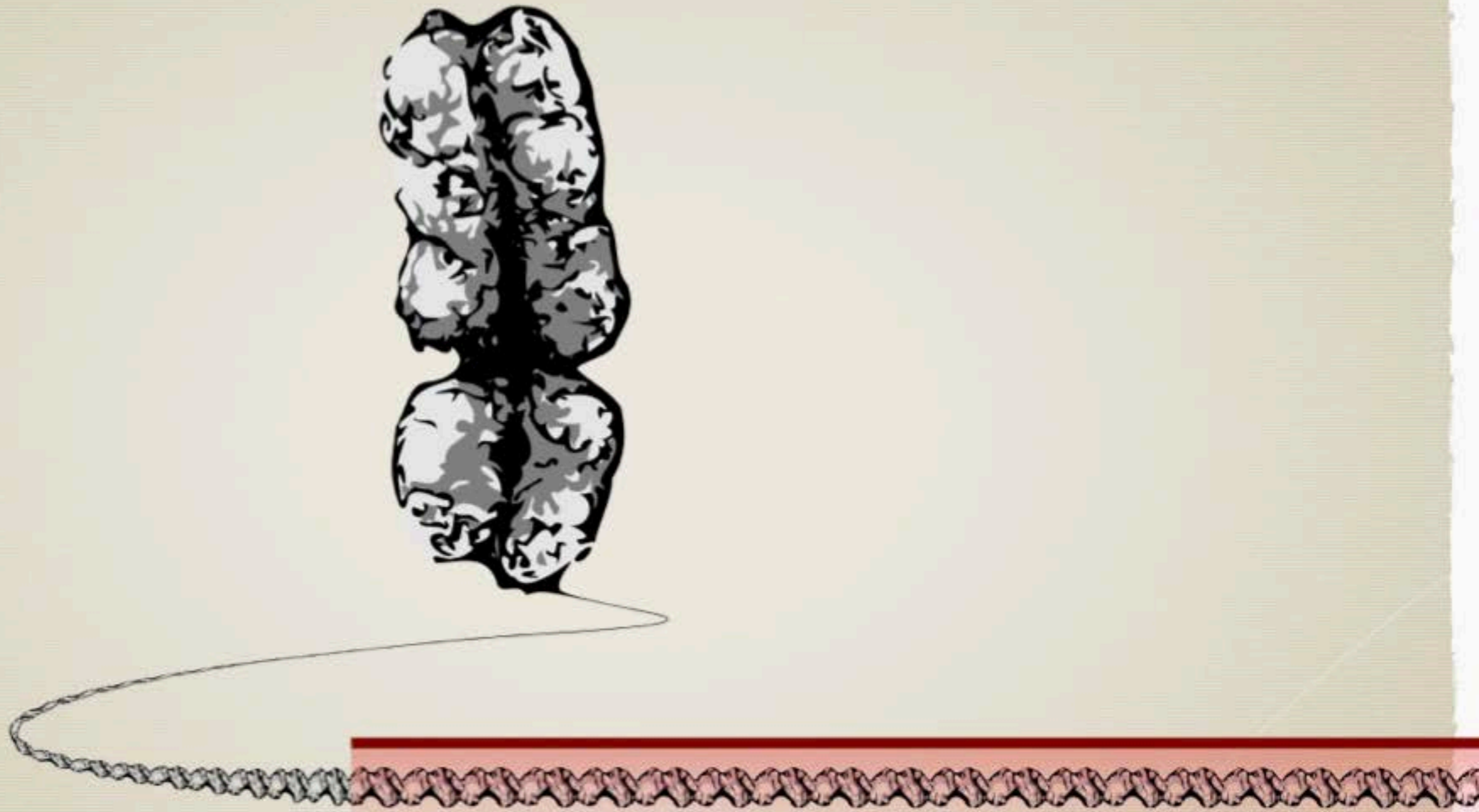
COVID-19 Virus

Mutation



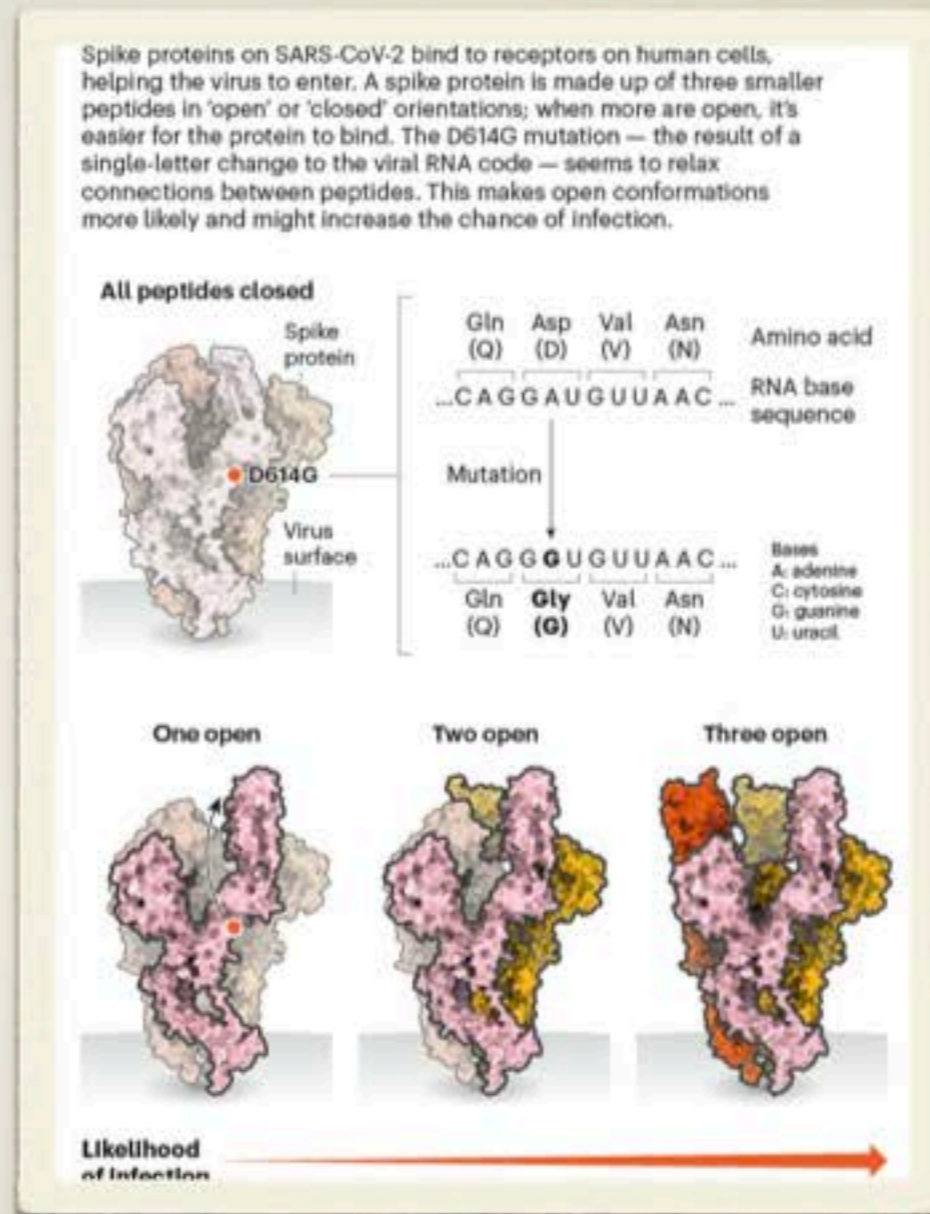
Chromosome spread out to show genetic material

Colored Double Helix portion can function as a gene to Code
Structure and Function



Mutation that loosens the spike protein

The letters (base sequences: C, A, G, etc) bond across and get portions working together as genes. One letter change can change the function of the gene.



THE MUTATION THAT LOOSENS THE SPIKE PROTEIN

Spike proteins on SARS-CoV-2 bind to receptors on human cells, helping the virus to enter. A spike protein is made up of three smaller peptides in 'open' or 'closed' orientations; when more are open, it's easier for the protein to bind. The D614G mutation — the result of a single-letter change to the viral RNA code — seems to relax connections between peptides. This makes open conformations more likely and might increase the chance of infection.

