



Implications of Influenza Properties

(No! Don't sneeze on me . . .)

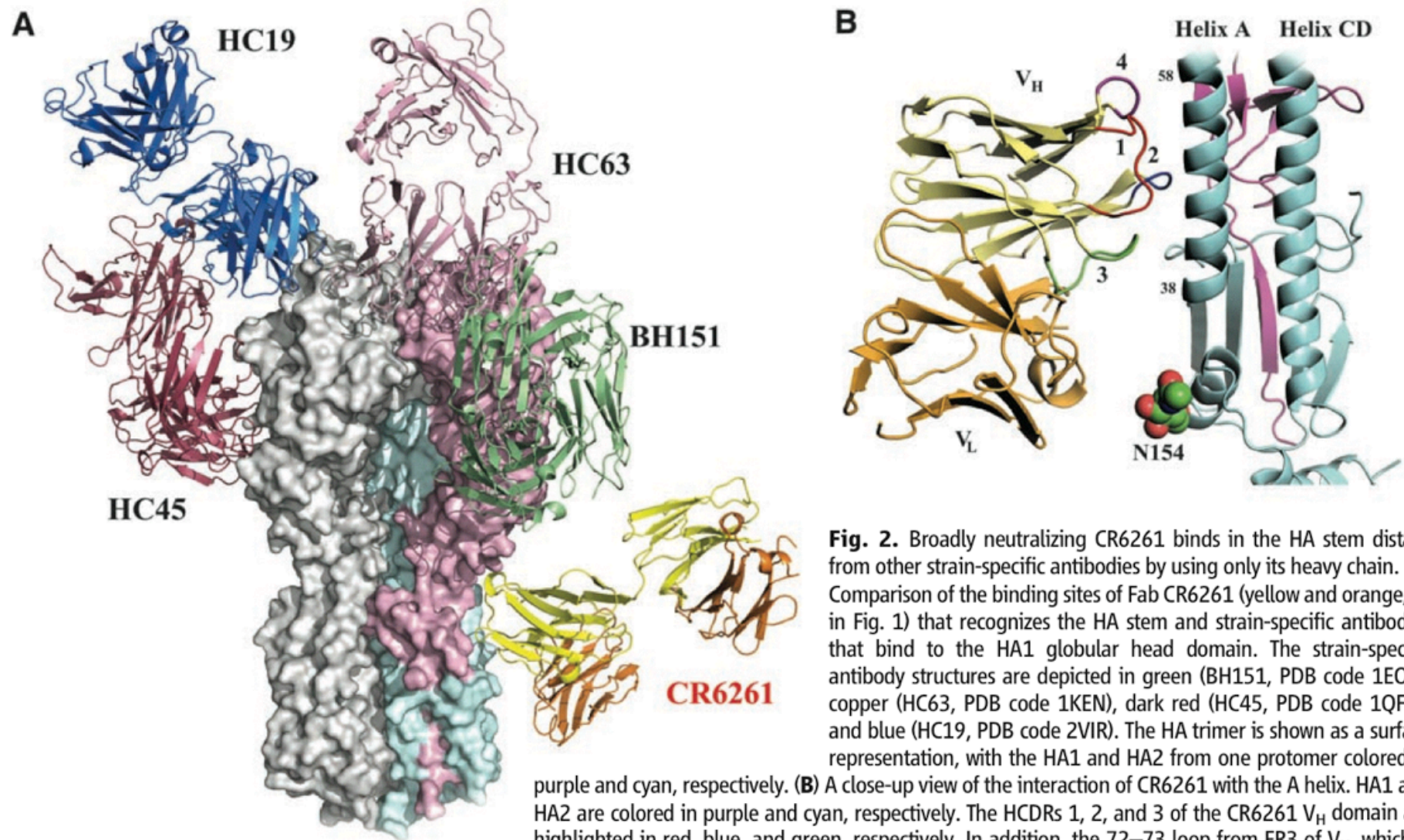


Fig. 2. Broadly neutralizing CR6261 binds in the HA stem distant from other strain-specific antibodies by using only its heavy chain. **(A)** Comparison of the binding sites of Fab CR6261 (yellow and orange, as in Fig. 1) that recognizes the HA stem and strain-specific antibodies that bind to the HA1 globular head domain. The strain-specific antibody structures are depicted in green (BH151, PDB code 1E08), copper (HC63, PDB code 1KEN), dark red (HC45, PDB code 1QFU), and blue (HC19, PDB code 2VIR). The HA trimer is shown as a surface representation, with the HA1 and HA2 from one protomer colored in purple and cyan, respectively. **(B)** A close-up view of the interaction of CR6261 with the A helix. HA1 and HA2 are colored in purple and cyan, respectively. The HCDRs 1, 2, and 3 of the CR6261 V_H domain are highlighted in red, blue, and green, respectively. In addition, the 72–73 loop from FR3 of V_H , which is structurally analogous to the CDR HV4 of a TCR, is indicated in purple. CDR1 runs along the side of the A helix, interacting with five consecutive helical turns. In contrast, the light chain makes no contacts with the HA and is separated from the nearest HA side chain by ~ 8 Å. The N-linked carbohydrate attached to Asn¹⁵⁴ (N154) that prevents the light chain from making contact with the HA is shown in red (oxygen) and green (carbon) balls.

Stem Cells

Basic Science

Bioengineering

Stem Cells

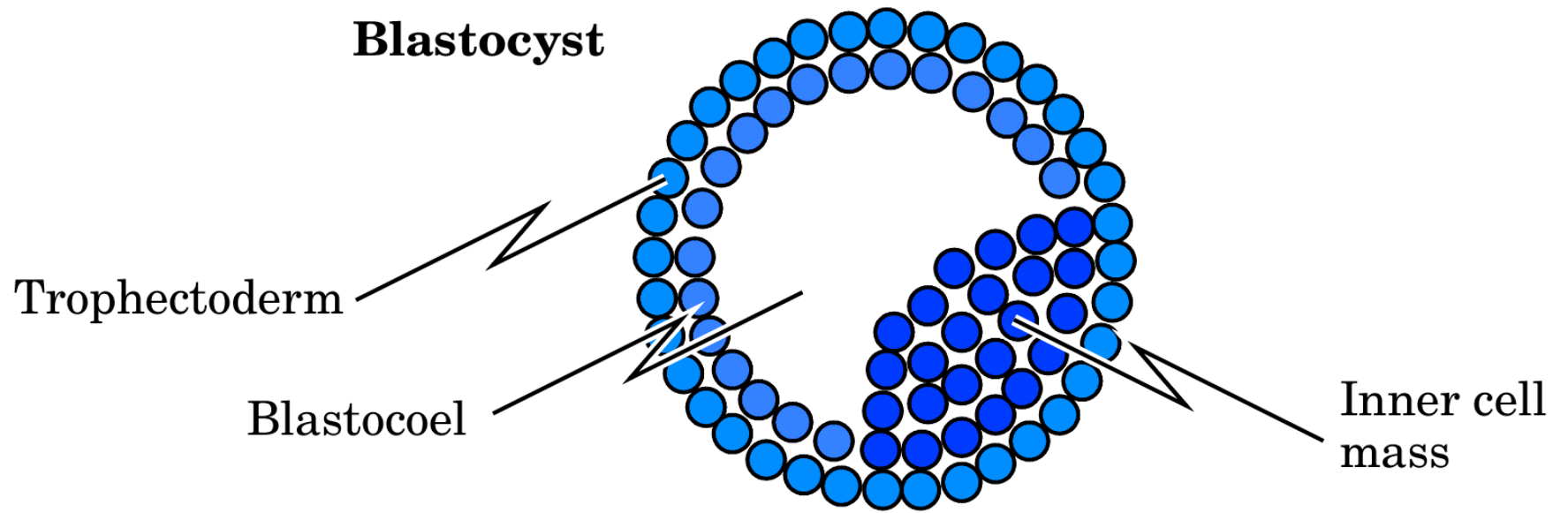
Totipotent

Pluripotent

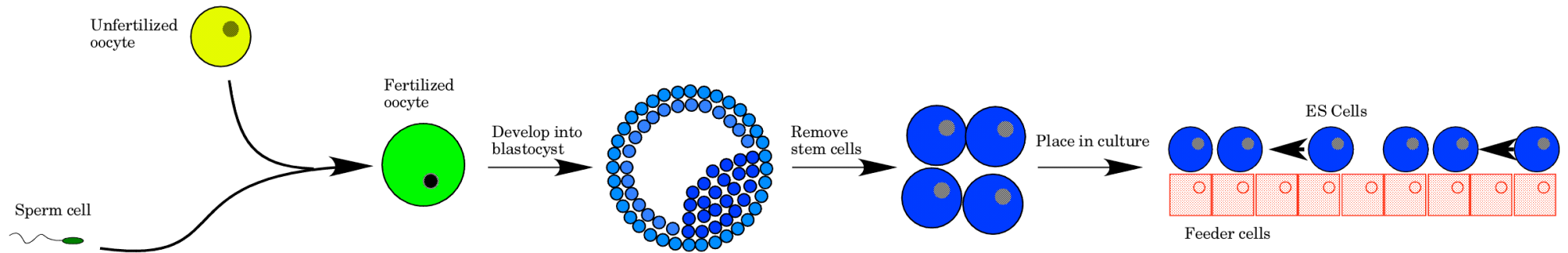
Multipotent

Unipotent

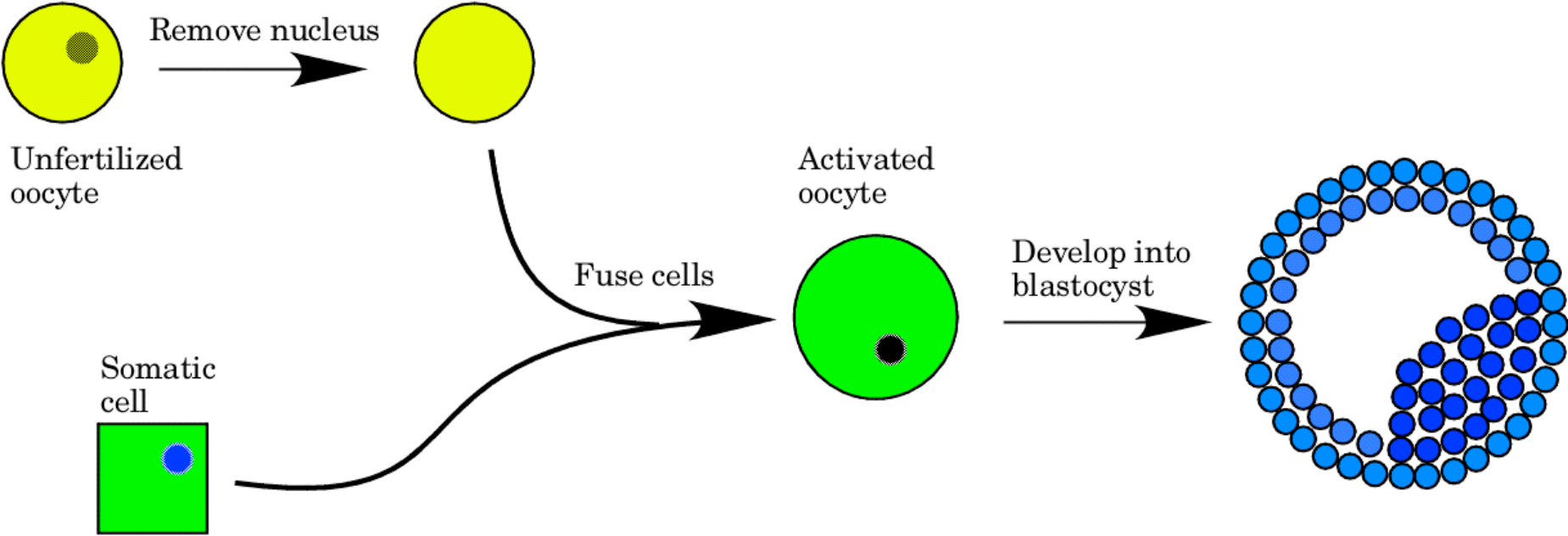
Embryonic Geometry



Producing Embryonic Stem Cells



Cloning



Induced Pluripotent Stem Cells

