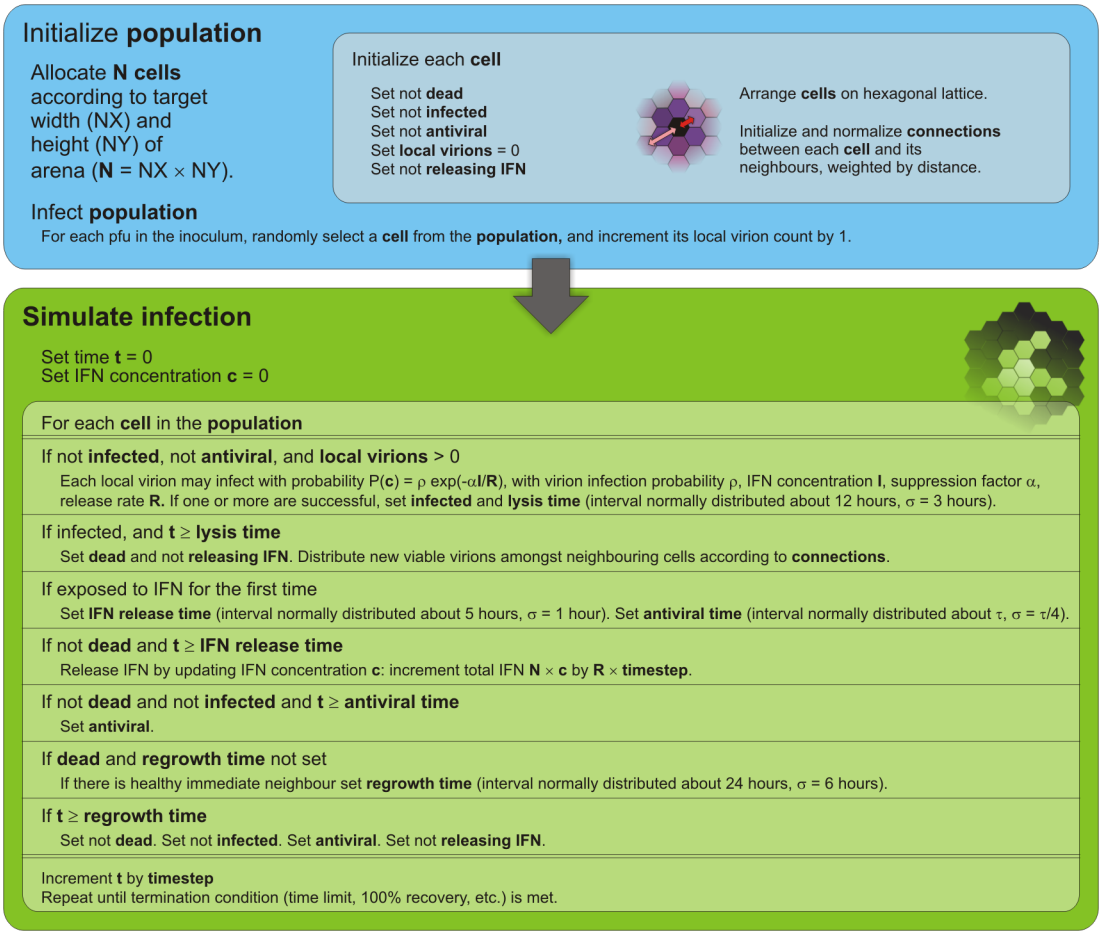

Figure 1: Schematic of model execution. Execution begins with allocation and initialisation of the cell objects, including the establishment of inter-cell connections which define the geometry of the virtual monolayer (in this case, a hexagonal array). The monolayer is then infected, by randomly depositing a viable virion for each unit pfu in the inoculum. Time and IFN concentration are set to zero, then the model iterates through each cell, updating the state of each according to the model equations and parameters. Extracellular virion counts are cached, so that new virions released by a cell do not infect neighbouring cells in the same iteration. Model execution stops once the specified termination condition has been fulfilled. This is usually a time limit, but may also be given in terms of the percentage plaque, IFN concentration, or any other model variable.

Animations of model output

Three animations of graphical model output were created, each showing the progression of infection in part of a 'virtual' tissue culture from $t = 0$ to $t = 6$ days post infection; the time between frames is 6 hours.

File	Description
`mdbk.avi`	An infection in unprimed MDBK cells.
`mdbk-primed.avi`	An infection in MDBK cells primed for 12 hours prior to infection with $\approx$ 2.0 units of IFN/cell.
`vero.avi`	An infection in Vero cells.