Class

CACell

this class describes the cell and its state, and has methods to update the cell's state

Fields

maxCycle type: int

this sets the CAmax to 4 (see type)

rand type: Random

random variable

canMoveLeft type: boolean

keep track of the state of the cell

canMoveRight type: boolean

ditto

canStay type: boolean

ditto

Available type: boolean

keep track of the state of the cell

type type: int

type of cell: 0 = space, 1 = SC, 2 = CA 1....5 = CA 4

home type: CABoxStatic

The box the cell sits in

stain type: double

could be used to indicate age

scRate type: double

Relative SC proliferaion rate if scRate = 0.5 SC proliferaion rate would

be half CA rate

lineage type: int

unique number for each cell in the initial set

Constructors

CACell(CABoxStatic home,int lin)

gives the cell a home, a lineage, a stain of zero, and makes the home unavailable

Methods

maintain(ParamVals params) Returns void

Determines if a Cell can detach or grow and sets counters

growth(CACell cHold) Returns void

Growth occurs into cell

grow() Returns boolean

given movement left or right checks for space and moves