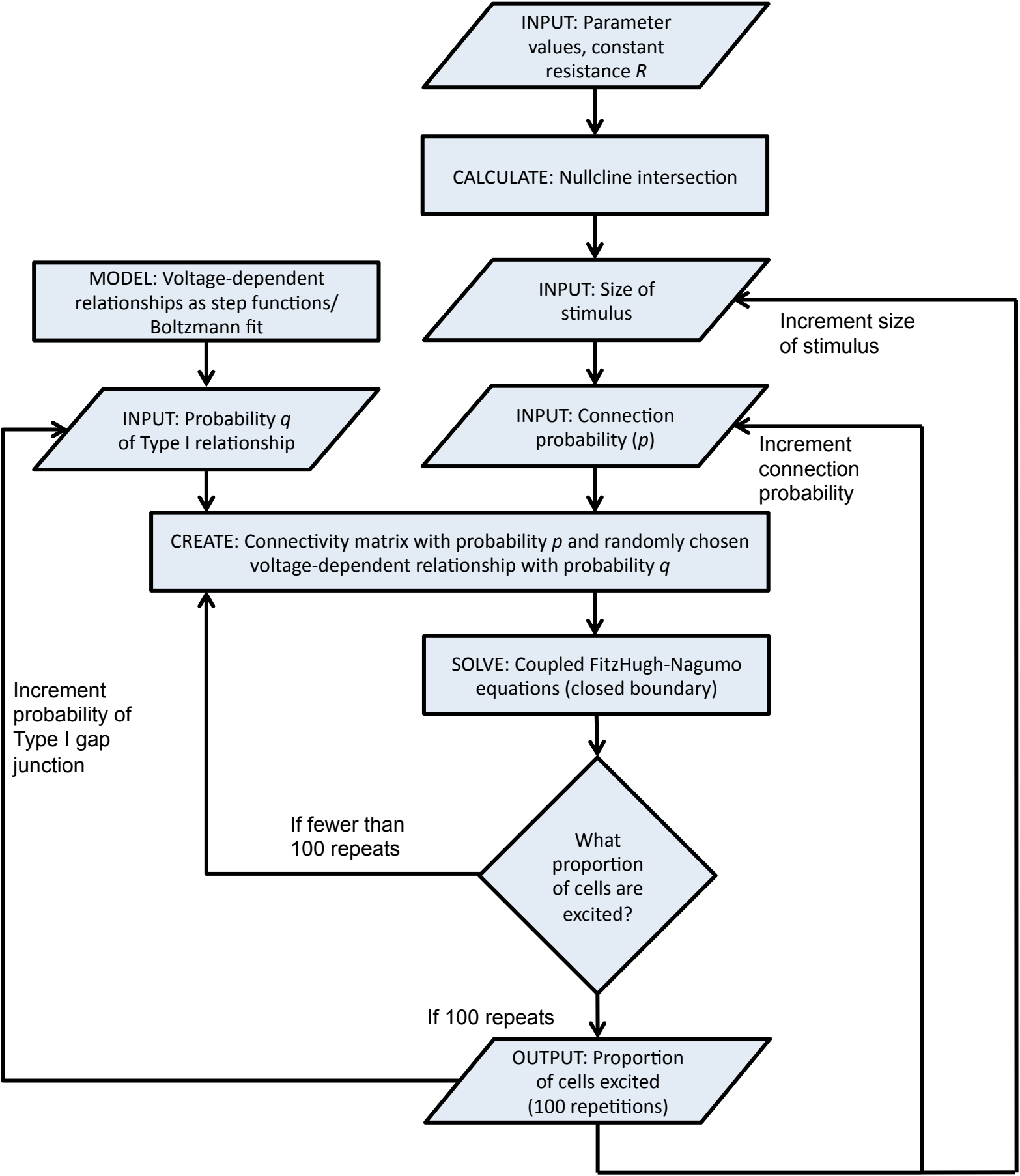
INPUT: Parameter values, constant resistance R
CALCULATE: Nullcline intersection
MODEL: Voltage-dependent relationships as step functions/ Boltzmann fit
INPUT: Size of stimulus
Increment size of stimulus
INPUT: Probability q of Type I relationship
INPUT: Connection probability (p)
Increment connection probability
CREATE: Connectivity matrix with probability p and randomly chosen voltage-dependent relationship with probability q
SOLVE: Coupled FitzHugh-Nagumo equations (closed boundary)
Increment probability of Type I gap junction
If fewer than 100 repeats
What proportion of cells are excited?
If 100 repeats
OUTPUT: Proportion of cells excited (100 repetitions)