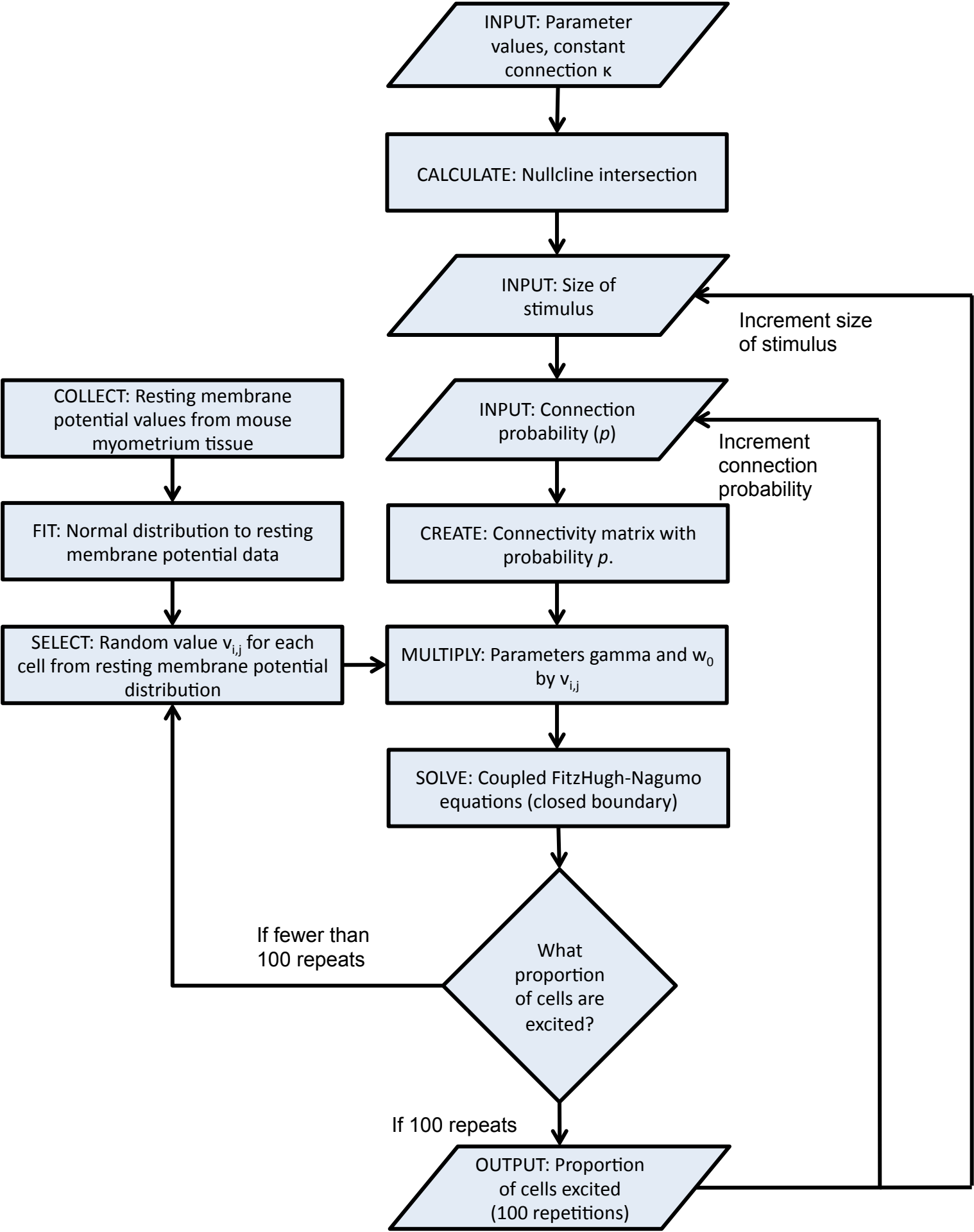
INPUT: Parameter values, constant connection κ
CALCULATE: Nullcline intersection
INPUT: Size of stimulus
Increment size of stimulus
INPUT: Connection probability (p)
Increment connection probability
CREATE: Connectivity matrix with probability p.
COLLECT: Resting membrane potential values from mouse myometrium tissue
FIT: Normal distribution to resting membrane potential data
SELECT: Random value $v_{i,j}$ for each cell from resting membrane potential distribution
MULTIPLY: Parameters gamma and w_0 by $v_{i,j}$
SOLVE: Coupled FitzHugh-Nagumo equations (closed boundary)
What proportion of cells are excited?
If fewer than 100 repeats
If 100 repeats
OUTPUT: Proportion of cells excited (100 repetitions)