D	Synapse
Type	current synapse with α-function shaped postsynaptic currents (PSCs)
Dynamics	input current: $I(t) = \sum_i h(t - t_i)$ with kernel $h(t) = I_0 \frac{t}{\tau} e^{1-(t-t_i)/\tau} \theta(t - t_i)$ where t_i is the arrival time of presynaptic spike i, θ is Heaviside step function, with time constant τ and amplitude $I_0 = I_e$, I_i for excitatory and inhibitory synapses respectively
Parameters	τ, I_e, I_i

E	Input
	Poissonian input
Uncorrelated input	each cell receives n_{syn} independent excitatory inputs generated by Poissonian point processes with rate r_{syn}
Correlated input	each cell receives n_{syn} excitatory inputs drawn (without resampling) from a finite-sized pool (size n_{pool}) of independent Poissonian point processes with rate r_{syn} resulting in correlation $c_{\text{in}} = n_{\text{syn}}/n_{\text{pool}}$ between total input current of different cells
Synapse placement	synapses placed on dendrites in certain layers depending on synaptic input region (apical/homogeneous/basal) and cell type: **cell type** | **apical** | **homogeneous** | **basal** L3 | upper half of L23 | L1 and L23 | lower half of L23 L4 | - | L4 | - L5 | L1 and L23 | all layers | L5 and L6 Random placement of synapses within allowed boundaries with uniform density with respect to membrane area (note: n_{syn} is fixed irrespective of input region)
Parameters	n_{syn}, r_{syn}, c_{in}

F	Measurements
	Simulated LFP
Type	extracellular field potentials (representing the LFP) calculated using the line-source method
Assumptions	extracellular medium as assumed to be purely resistive (non-capacitive) and inifitely-volumed with extracellular conductivity σ_{cond}
Electrode properties	ideal (non-filtering) point electrode placed either in the center (r=0) of the cylindrical geometry, or offset by some distance; at depths corresponding to the middle of each layer (see Table S1:Population).
Parameters	σ_{cond}