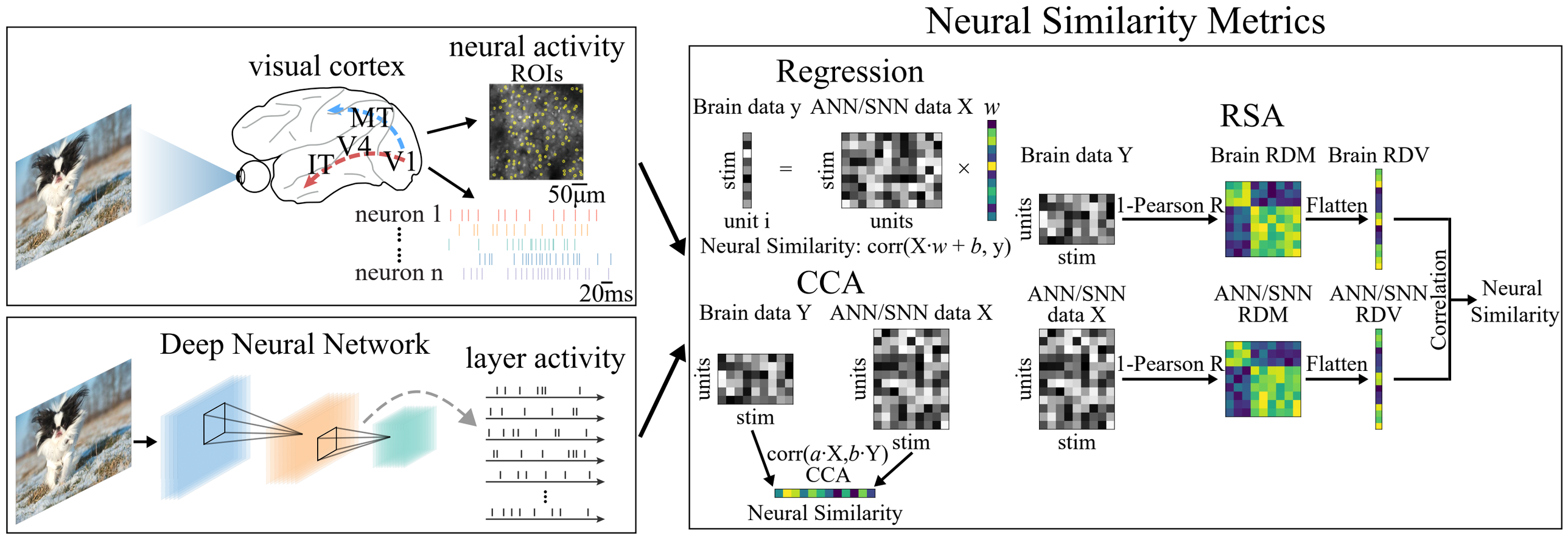
visual cortex
neural activity
ROIs
MT
V4
IT
V1
50μm
neuron 1
neuron n
20ms
Deep Neural Network
layer activity
Neural Similarity Metrics
Regression
Brain data y
ANN/SNN data X
w
stim
unit i
units
Neural Similarity: corr(X·w + b, y)
RSA
Brain data Y
Brain RDM
Brain RDV
1-Pearson R
Flatten
CCA
ANN/SNN data X
ANN/SNN RDM
ANN/SNN RDV
corr(a·X,b·Y)
CCA
Correlation
Neural Similarity