

Table S1. Architectures (sequence of layers) of CNNs considered in the study. ‘ConvN1-N2’ denotes a convolutional layer with a kernel of size N1xN2; ‘maxpool N1 x N2’, max-pooling layer with a N1xN2 filter; ‘FC-N’, fully connected layer with N nodes; ‘skip connection’, connection that skips one or more layers; it performs an identity mapping and is added to the output of the convolutional layer; ‘sigmoid’, sigmoid activation function for a binary classification.

CNN configuration				
VGG13	VGG13 FirstPool4	VGG12	VGG12 FirstPool4	Res+VGG13
input: 256 x 256 RGB image				
conv3-16 conv3-16	conv3-16 conv3-16	conv3-16 conv3-16	conv3-16 conv3-16	conv3-16 conv3-16 skip connection
maxpool 2 x 2	maxpool 4 x 4	maxpool 2 x 2	maxpool 4 x 4	maxpool 2 x 2
conv3-32 conv3-32	conv3-32 conv3-32	conv3-32 conv3-32	conv3-32 conv3-32	conv3-32 conv3-32 skip connection
maxpool 2 x 2				
conv3-64 conv3-64	conv3-64 conv3-64	conv3-64 conv3-64	conv3-64 conv3-64	conv3-64 conv3-64 skip connection
maxpool 2 x 2				
conv3-128 conv3-128	conv3-128 conv3-128	conv3-128 conv3-128	conv3-128 conv3-128	conv3-128 conv3-128 skip connection
maxpool 2 x 2				
conv3-128 conv3-128	conv3-128 conv3-128	conv3-128 conv3-128	conv3-128 conv3-128	conv3-128 conv3-128 skip connection
maxpool 2 x 2				
conv3-128 conv3-128	conv3-128 conv3-128	conv3-128	conv3-128	conv3-128 conv3-128 skip connection
maxpool 2 x 2				
FC-512	FC-128	FC-512	FC-128	FC-512
output: sigmoid for classification probability				