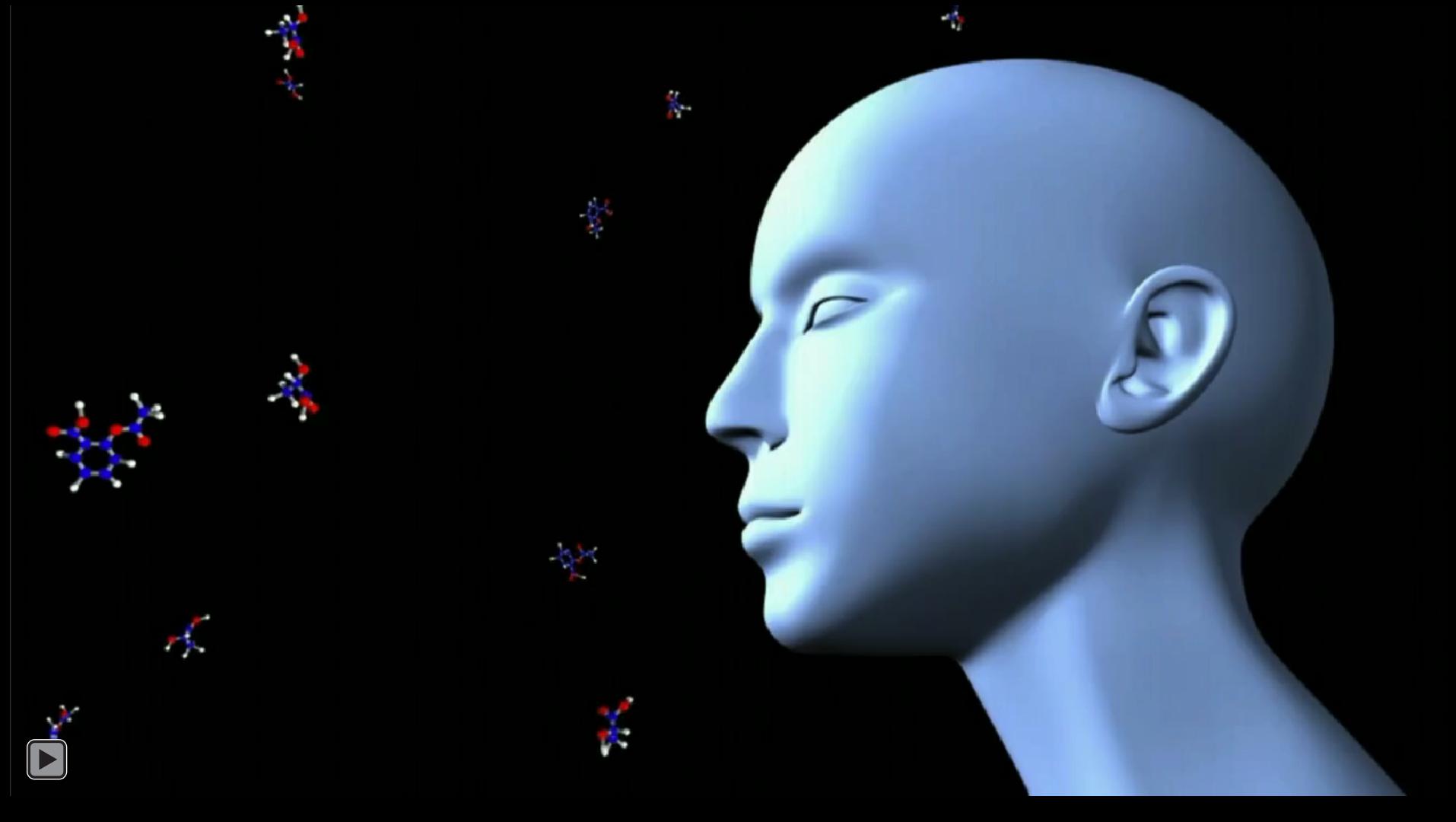


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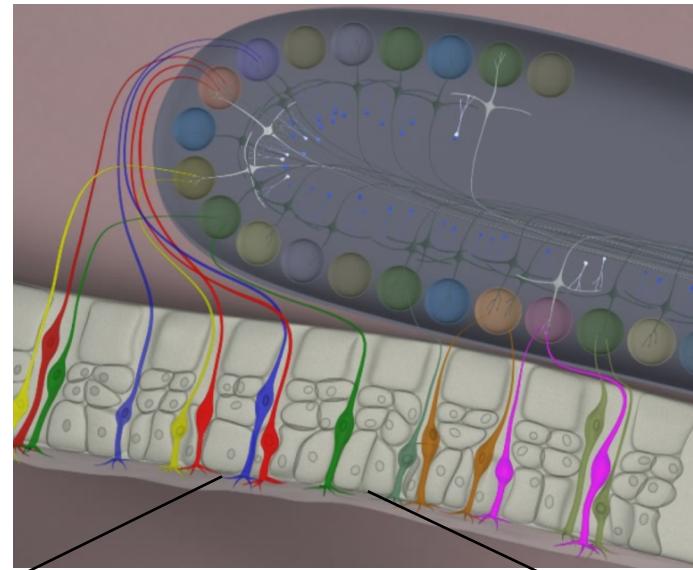
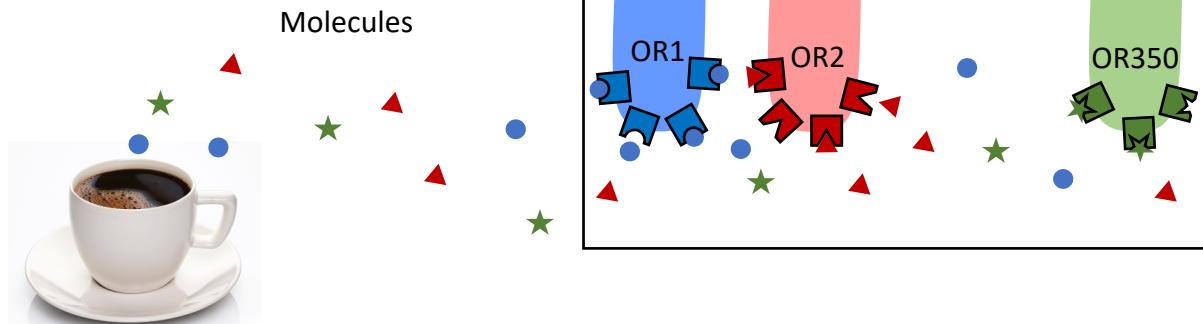


DeepNose: Using artificial neural networks to represents the space of odorants

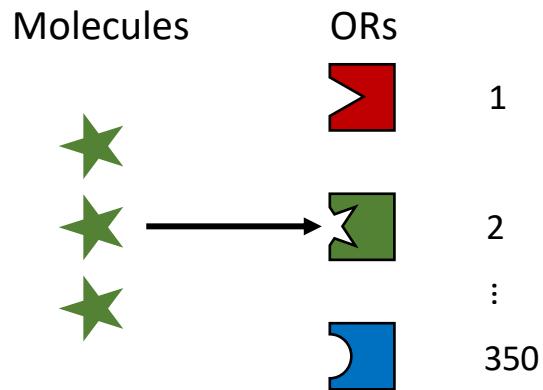
Tumi Ngoc Tran, Daniel Kepple, Sergey Shuvaev, Alexei Koulakov
Cold Spring Harbor Laboratory



Odorant Receptors (ORs)

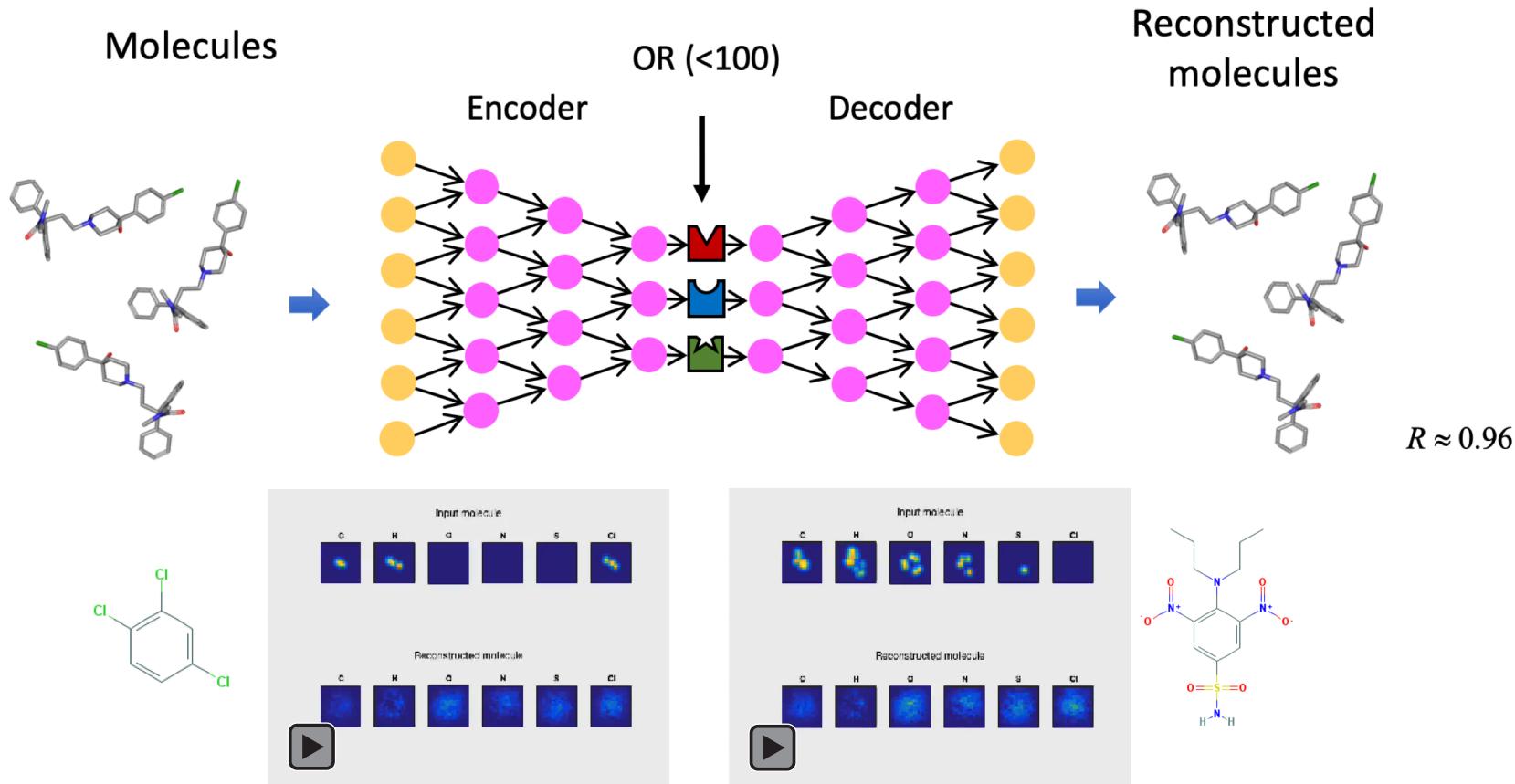


Hypothesis: Odorant receptors are 3D molecular filters.

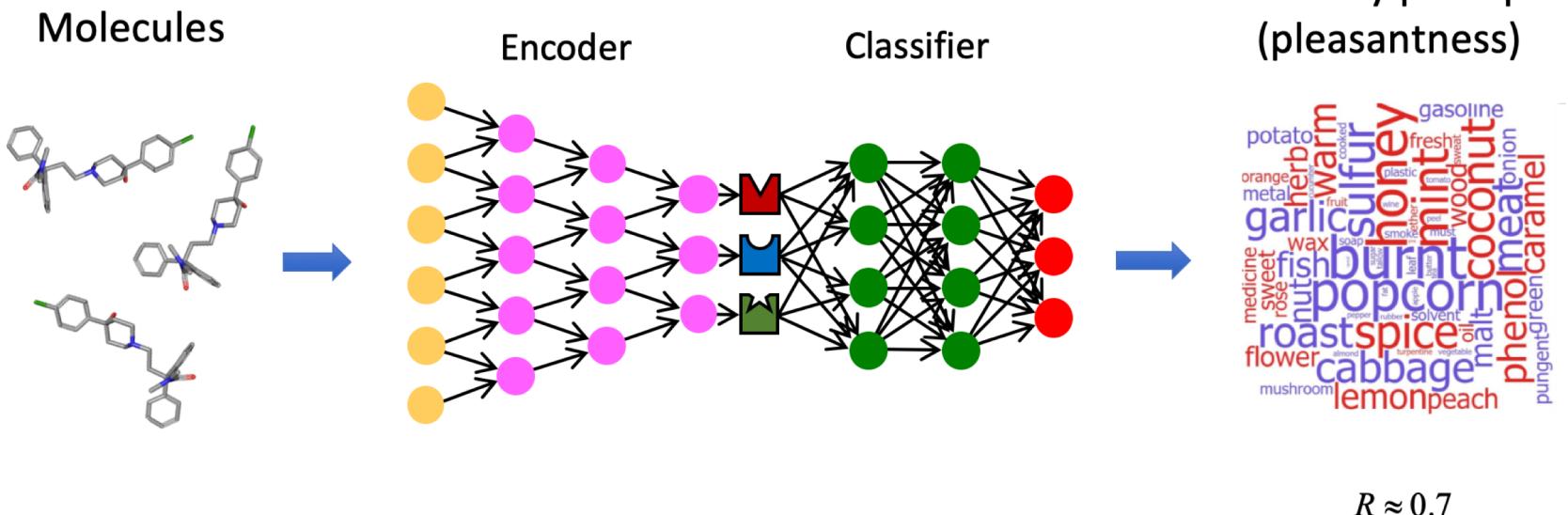


Corollary: They can be ‘trained’ using neural network methods.

DeepNose autoencoder



DeepNose classifier





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