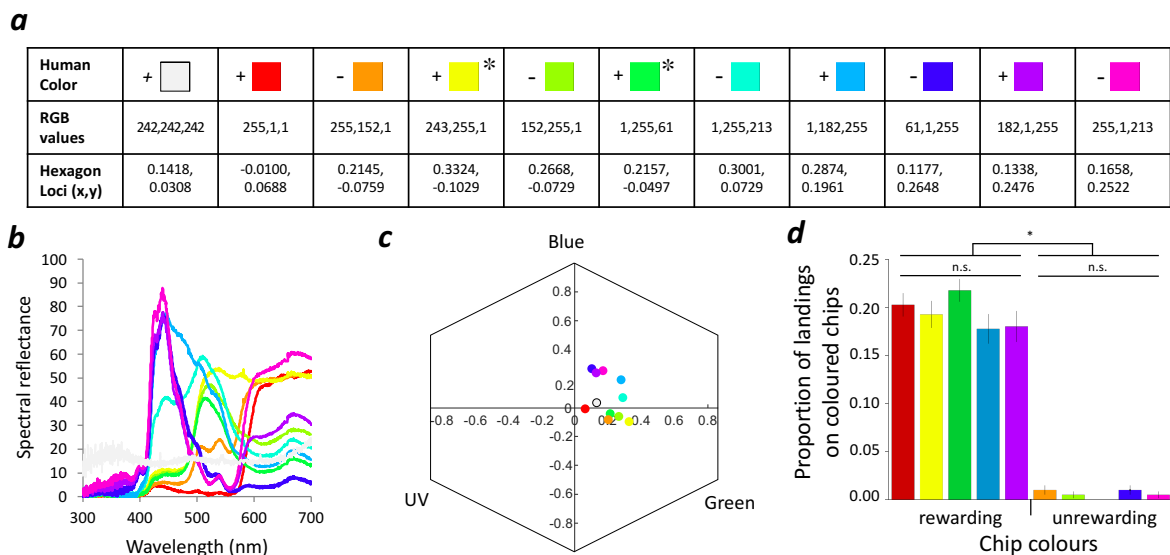


1 **A possible structural correlate of learning performance on a colour discrimination task**  
 2 **in the brain of the bumblebee**

3 Li Li, HaDi MaBouDi, Michaela Egertová, Maurice R. Elphick, Lars Chittka, Clint J. Perry\*  
 4 School of Biological and Chemical Sciences, Queen Mary University of London, London E1 4NS, UK

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 6 Corresponding Author: Clint J. Perry, School of Biological and Chemical Sciences, Queen Mary  
 7 University of London, London E1 4NS, UK, clint.perry@qmul.ac.uk

10 **Supplementary Material: Figure S1**



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13 **Figure S1.** Specifications of colours used for all experiments. (a) Human visual depiction of  
 14 each of the colours used in experiments, with RGB values and bee vision hexagon loci. +/-  
 15 symbols indicate rewarding (+) and unrewarding (-) chips during training. Asterisks indicate  
 16 yellow and green chips used for 2-colour Learning group in Experiment Experiment 3. (b)  
 17 Spectral reflectance plot of each of the colours used. (c) Loci of chip colours in bee colour  
 18 space, describing the range of colours a bee can see given their three photoreceptors sensitive  
 19 to Blue, Green and UV light. Dots indicate each of the chip colours used in the experiments  
 20 and are shown with human depicted colours. The closer to the center the dot, the greyer the  
 21 colour appears to the bee, and the closer to the edge, the brighter the colour appears. The closer

22 the dots are together the more similar they look to a bee. (d) Histogram of landings among  
23 rewarding colours during training. During the last 10 landings of training, bees landed more on  
24 all rewarding colours than any unrewarding colours (GLMM:  $p < 0.0001$ ; table S6), but there  
25 was no difference amongst rewarding colours and no difference amongst unrewarding colours.  
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