

**Figure S9: Preference scores underlying the performance indices from Figure 9.** Documentation of preference scores (PREF) for the sketched training and testing conditions, namely **(A)** for either differential training or differential testing using n-amylacetate and 1-octanol as odors (grey and blue clouds, respectively) with the testing carried out on a pure substrate, **(B)** for the indicated number of training trials using 1-octanol for training and testing, with testing carried out on a pure substrate, or after the same training regimen but tested on **(C)** a fructose substrate. Green Petri dishes indicate fructose; dishes without fill indicate Petri dishes with only the substrate, i.e. pure agarose, but without any tastant added. In the two left-most plots in **(A)** positive scores reflect <u>avoidance</u> of 1-octanol; in all other cases positive scores reflect <u>approach</u> towards 1-octanol. Data are displayed as box plots, with the median as the middle line, the box boundaries as 25 and 75 % quantiles, and the whiskers as 10 and 90 % quantiles. Sample sizes are indicated within the figure.