



**Supplemental Figure 1: Performance of proposed and commercial subsets using sum of sensitivity and specificity at best threshold metric.** (A) Performance of commercially available and proposed odor subsets was also computed using the sum of the sensitivity and specificity at the best threshold for that odor combination in this cohort. No combination outperformed the full 40-item UPSIT. The order of the x-axis is the same as in Figure 1B. (B) The two metrics (AUC and sensitivity + specificity) were correlated ( $R^2 = 0.83$ ,  $p < 0.001$ ). Each circle represents one proposed or commercially available combination in Figure 1A; the area of each circle is proportional to the number of items in that combination. (C) The distribution of this metric was computed (black) or estimated (gray) for each combination of odors of a given length. The mean and 95% confidence interval are shown. No proposed or commercially available subsets (black squares) were outside the 95% confidence interval for the performance of a randomly selected subset of the same length