

Neurobiology. In the article "Olfactory transduction is intrinsically noisy" by Graeme Lowe and Geoffrey H. Gold, which appeared in number 17, August 15, 1995, of *Proc. Natl. Acad. Sci. USA* (92, 7864–7868), the authors request that the fol-

lowing be noted. The numbers along the *x* axis of Fig. 4 *A*, *B*, and *D* are incorrect. A corrected Fig. 4 and accompanying legend are reproduced below.

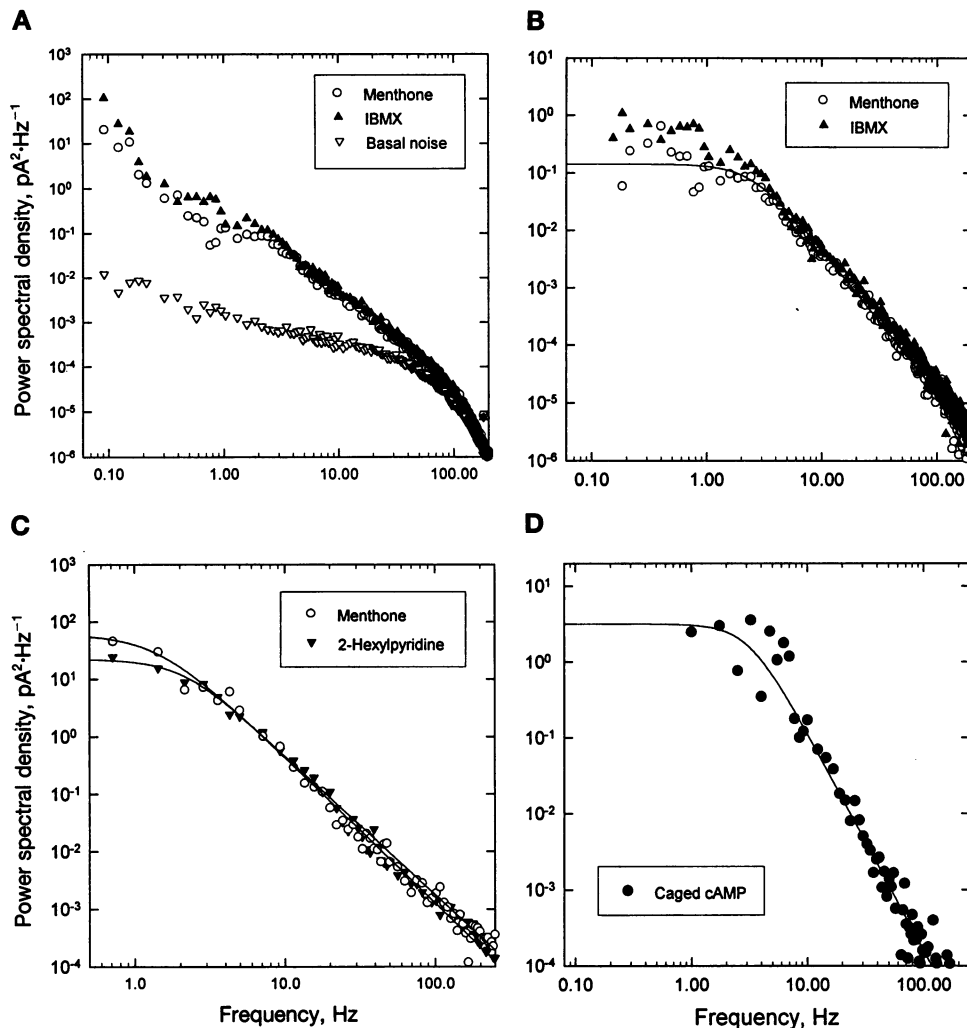


FIG. 4. Power spectra of fluctuations in responses to stepped application of odorants, menthone, or IBMX. (*A*) Raw power spectra of traces, including responses to menthone or IBMX, and of the baseline current in the absence of stimuli. The power spectra for menthone and IBMX each represent an average of three spectra computed from three responses to step stimuli recorded from the same cell (which was different from the cells shown in Fig. 3). The power spectrum of the baseline noise was computed from six current traces acquired from this cell in the absence of stimuli. (*B*) Power spectra of the fluctuations in the responses to menthone or IBMX for the cell shown in *A*. The fluctuations were isolated by subtracting an estimate of the mean current from individual traces. The power spectrum of the baseline noise was then subtracted from the power spectrum of the fluctuations, and the resulting power spectrum was divided by the square of the transfer function of the 8-pole Bessel filter used for antialiasing. The mean current was estimated by fitting an 8- to 12-order polynomial to the traces, which was about the minimum order required to fit traces exhibiting little noise. It was not possible to estimate the mean current by collecting an ensemble average because of the short durations of most recordings (10–20 min). In *A* and *B*, responses to 22-s stimuli were sampled every 2 ms, with the 3 dB cutoff frequency of the filter set to 125 Hz. Each point from 0.2–1 Hz is the average of 3 raw frequency points from 1–10 Hz, the average of 9 points, and above 10 Hz, the average of 27 points. The continuous curves fitted to the data were $A/[1 + (f/f_0)^n]$, where $A = 0.14 \text{ pA}^2\text{-s}$, $f_0 = 2.54 \text{ Hz}$, and $n = 2.50$ for menthone; and $A = 0.58 \text{ pA}^2\text{-s}$, $f_0 = 1.34 \text{ Hz}$, and $n = 2.37$ for IBMX. The parameters for a stationary response from one cell to menthone were the following: $A = 0.94 \text{ pA}^2\text{-s}$, $f_0 = 0.99 \text{ Hz}$, and $n = 1.93$. (*C*) Power spectra of the fluctuations in the responses to the odorants menthone and 2-hexylpyridine, recorded from the cell shown in Fig. 1. A series of consecutive responses to transient odorant stimuli (90-ms pulses for menthone, 120-ms pulses for 2-hexylpyridine) were recorded (13 responses for menthone, 14 for 2-hexylpyridine), and the mean responses were subtracted to yield traces for calculation of averaged power spectra. Averaged baseline noise spectra were computed from traces recorded between each stimulus and subtracted from the power spectra of the fluctuations. The duration of the responses was 1.6 s for both stimuli. Responses were sampled every 1 ms, with the 3-dB cutoff frequency of the filter set to 250 Hz. Points below 5 Hz are raw frequency points, those from 5–50 Hz, the average of three points, and those above 50 Hz, the average of nine points. Continuous curves were fit to the data as in *A*, with the following parameters: $A = 59.2 \text{ pA}^2\text{-s}$, $f_0 = 1.34 \text{ Hz}$, and $n = 2.41$ for menthone; and $A = 22.6 \text{ pA}^2\text{-s}$, $f_0 = 2.13 \text{ Hz}$, and $n = 2.54$ for 2-hexylpyridine. (*D*) Power spectrum of the photolysis response from the cell shown in Fig. 3C. Curve fit parameters were as follows: $A = 3.15 \text{ pA}^2\text{-s}$, $f_0 = 3.14 \text{ Hz}$, and $n = 2.86$.