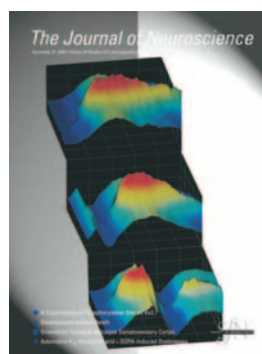


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Cover legend: Spotlight of neural responses to changes in luminance: Changes in luminance delay the emergence of orientation tuned cortical responses, and eliminate ongoing responses to effective stimuli. The three dimensional surfaces illustrate the dynamics of the subthreshold responses to gratings acquired during an in vivo intracellular recording from an orientation-selective neuron in primary visual cortex. In each panel, the excursion in subthreshold membrane potential (vertical axis, millivolts) is plotted against time (front horizontal axis, milliseconds) and grating orientation (left side axis, degrees). Surface plots illustrate responses to equiluminant gratings (top), gratings accompanied by an increase in mean luminance relative to a preceding uniform gray screen (middle), and equiluminant gratings that were followed by an increase in mean luminance after a delay of 100 milliseconds (bottom). For more information, see the article by Tucker and Fitzpatrick, this issue (pages 13537–13547).

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