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COVER The head of the blowfly *Calliphora erythrocephala* with its large compound eyes. Each eye contains about 5000 ommatidia, which provide the fly with all its information about the visual world. Because it is highly regular and easily accessible for electrophysiology, the fly visual system is widely used in the study of the fundamental aspects of neural information processing. See page 1854. [Photograph by H. L. Leertouwer]

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