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On the Cover: Dinoflagellates such as *Lingulodinium polyedrum* are unicellular photosynthetic marine protists. Cells are roughly spherical and are filled with an extensive and highly ramified array of chloroplasts, as seen here using confocal microscopy to visualize the natural fluorescence of chlorophyll inside the plastids. However, light harvesting is only half the story, as without an abundant electron sink, photosynthetic electron transport would grind to a halt. Unfortunately, the most efficient electron sink, carbon dioxide, is scarce in the marine environment, as most dissolved inorganic carbon is found as bicarbonate at the basic pH of seawater. *Lingulodinium* contains an external carbonic anhydrase that may help maintain CO₂ at its equilibrium concentration around the cell surface despite rapid photosynthesis rates. Photo by David Morse. (See Lapointe et al., pp. 1427–1436.)

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