

# ***AMERICAN SCIENTIST***

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## **THE COVER**

*The accordionlike blubber on a blue whale's underside extends from mouth to bellybutton (on the cover). The structure, found only in the family of baleen whales called rorquals, is made from firm ridges (left) connected by deep furrows of delicate elastic tissue, and can stretch to more than twice its original length. Thus the whale's oral cavity can expand to enormous size and hold many tens of tones of water and krill; the whale then filters out the water its baleen while retaining its tiny shrimplike prey. Exactly how rorquals engulf such quantities of water has long been obscured by ocean depths, but as Jeremy A. Goldbogen recounts in "The Ultimate Mouthful: Lunge Feeding in Rorqual Whales" (pages 124-131), electronics devices are aiding researchers in understanding the complex biomechanics behind how these enormous animals eat. (Cover image and image at left courtesy of Nick Pyenson.)*