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Cover: The structure of the respiratory system of crocodilians is unique compared with that of other reptiles. The semi-aquatic lifestyle of crocodilians is predicted to affect juveniles and adults differently, as the keratinized body wall of adults is suspected to change the system's dynamics. Reichert et al. (jeb193037) provide evidence that the respiratory system of *Caiman yacare* (pictured) stiffens during development as the body wall keratinizes. Most of the work of breathing is required to overcome elastic forces, which increase when animals are submerged. Changes in the development and habitat of *C. yacare* are reflected in the mechanics of the respiratory system. Photo credit: William K. Milsom.

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