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Cover: Oxygen levels inside the terrestrial eggs of red-eyed treefrogs (*Agalychnis callidryas*) vary with surface exposure but poorly exposed, hypoxic eggs develop synchronously with their better exposed clutchmates. J. R. Rogge and K. M. Warkentin (pp. 3627-3635) show that the embryonic external gills contribute substantially to oxygen uptake, and that embryos behaviorally position their gills in the best-oxygenated part of the egg, near the air. Exploiting this spatial refuge from hypoxia within the egg allows extended embryonic development of hatching-competent embryos, improving their ability to escape from aquatic predators after hatching. Photograph by Karen M. Warkentin.

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