



Cover: After shedding its rigid exoskeleton, this newly molted blue crab (*Callinectes sapidus*) is supported by a thin, flimsy cuticle. As crabs switch from a rigid to a hydrostatic skeleton during molting, the function of the exoskeleton (cuticle) changes. Examination of the mechanical properties of the cuticle during the molt cycle reveals significant changes that correspond with the change in mechanical function of the cuticle (see article by J. R. A. Taylor, J. Hebrank and W. M. Kier, pp. 4272–4278). The cuticle mechanical properties facilitate the use of two different skeletal support systems. Photograph by William M. Kier.

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