# The Journal of Experimental Biology 217 (22) November | Contents





**Cover:** An intertidal zone porcelain crab (*Petrolisthes cinctipes*) displaying the red highlights on the mouthparts and claw that are characteristic of this species. Intertidal zone organisms experience high variability in environmental conditions such as temperature and pH, and that variability is expected to increase as atmospheric carbon dioxide continues to rise. In this issue, Paganini et al. (pp. 3974–3980) show that under increased variability of temperature and pH these crabs have metabolic responses that could be ecologically unsustainable because of reduced overall energy availability and greater energy expenditure for basal maintenance. Photo credit: Adam Paganini.

## **INSIDE JEB**

**3955** Do homing pigeons navigate with gyroscope in brain?; European vinegar flies cope better with alcohol breakdown to hold their liquor; Future porcelain crabs in trouble; Correction: Double pole cross-country skiing more like sliding run; Bat body temperature does not affect memory

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- 3962 Nitrogen fixation in the mucus of Red Sea corals Grover, R., Ferrier-Pagès, C., Maguer, J.-F., Ezzat, L. and Fine, M.

#### **METHODS & TECHNIQUES**

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- **3974** Temperature and acidification variability reduce physiological performance in the intertidal zone porcelain crab *Petrolisthes cinctipes* **Paganini, A. W., Miller, N. A. and Stillman, J. H.**
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