Figure 1: depth and temperature of collections

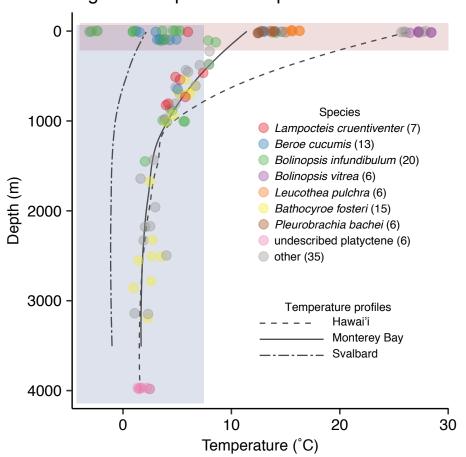


Figure 3: chain length and double bonds

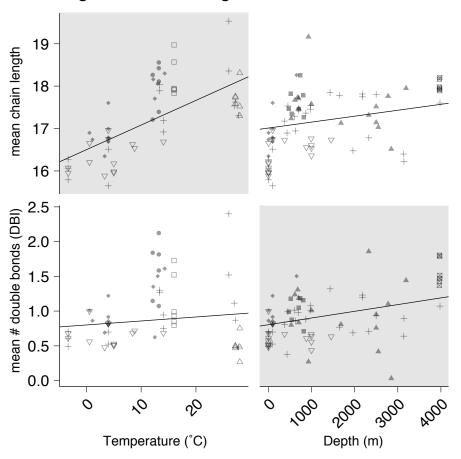
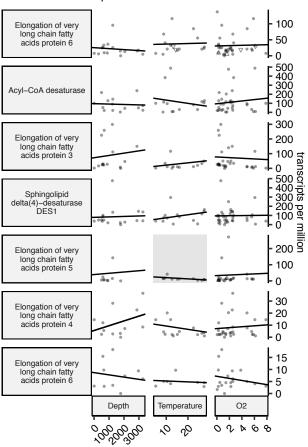
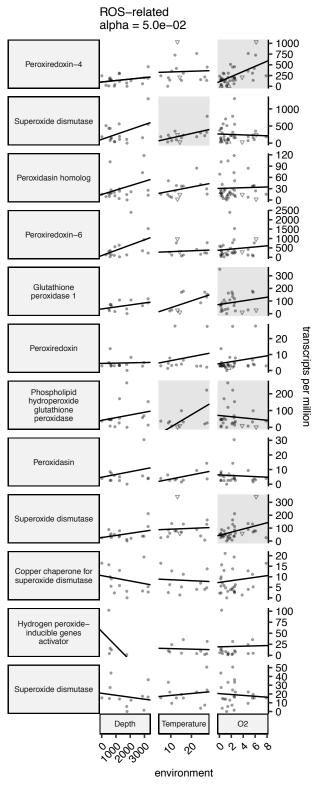


Figure 2: top six fatty acids **A** Composition **B** Environmental correlations 0.5 C14:0-ME 0.4 0.3 0.2 0.1 0.0 0.6 C16:0-ME 0.4 0.2 0.5 C18:0-ME 0.4 0.3 0.2 C18:1-ME 0.4 0.2 0.0 C20:5-ME 0.15 0.10 0.05 0.00 0.20 C22:6-ME 0.15 0.10 0.05 0.00 P Ó, mole fraction Depth (m) (all samples) Temperature (°C)

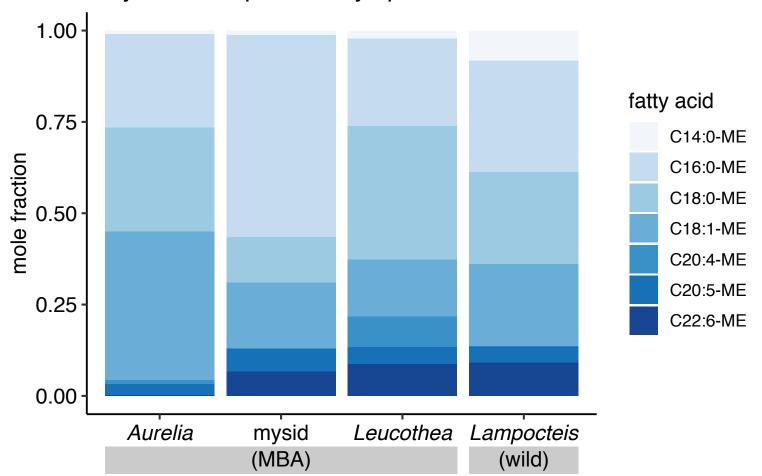
desaturases/elongases alpha = 5.0e-02



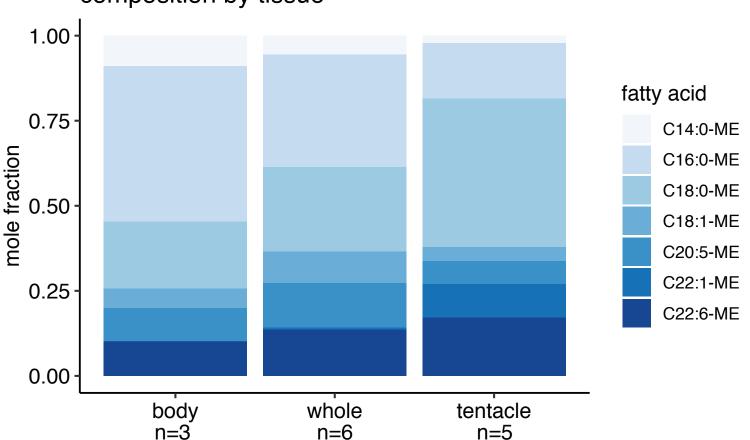
environment



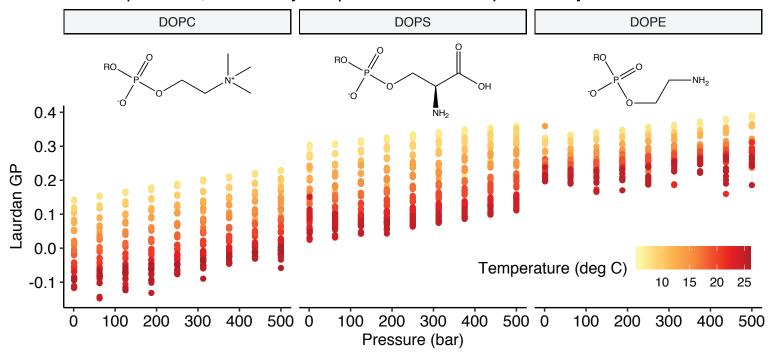
fatty acid composition by species



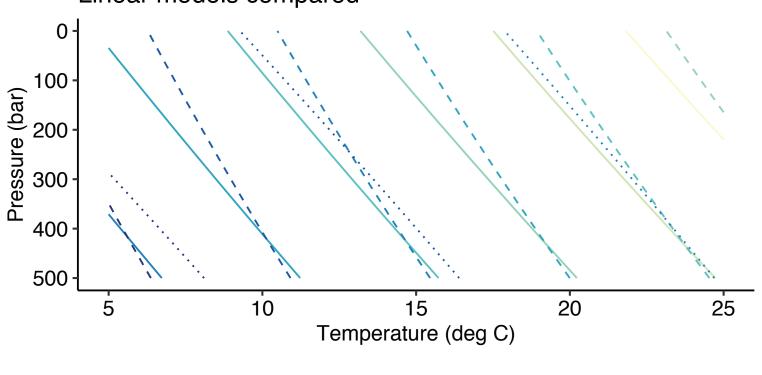
Pleurobrachia bachei composition by tissue



GP vs. pressure, colored by temperature: lamellar phase only







0.0 0.1 0.2 0.3

Compound

— DOPC -- DOPS ···· DOPE