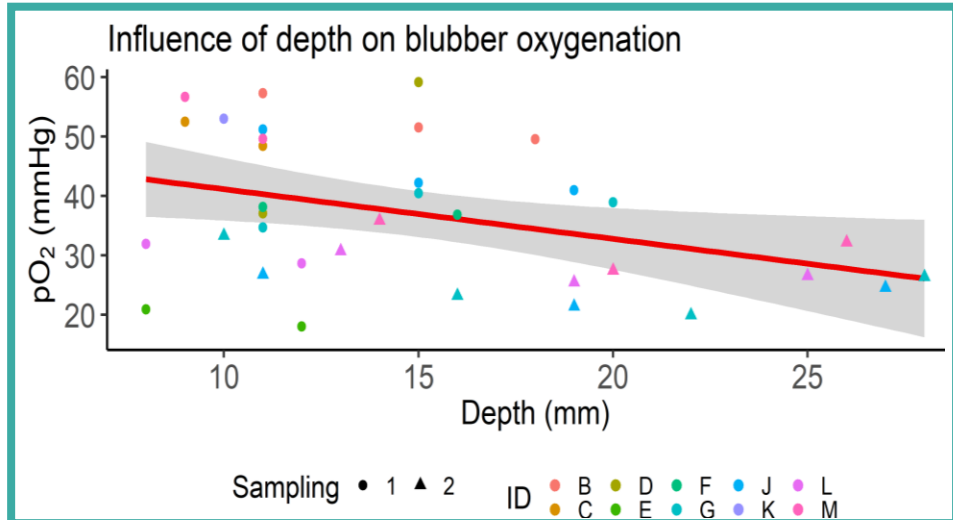
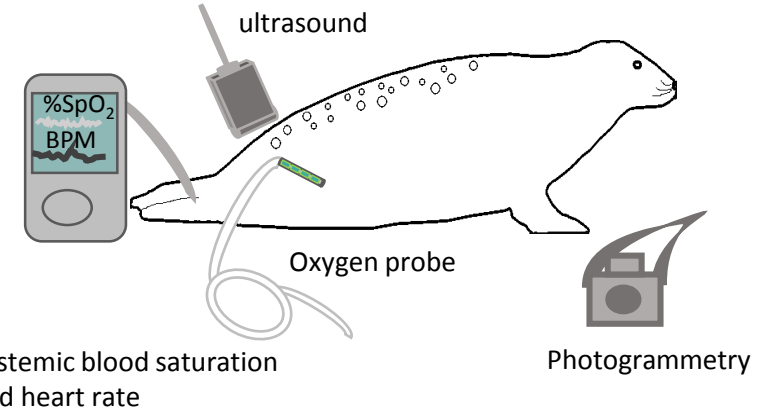
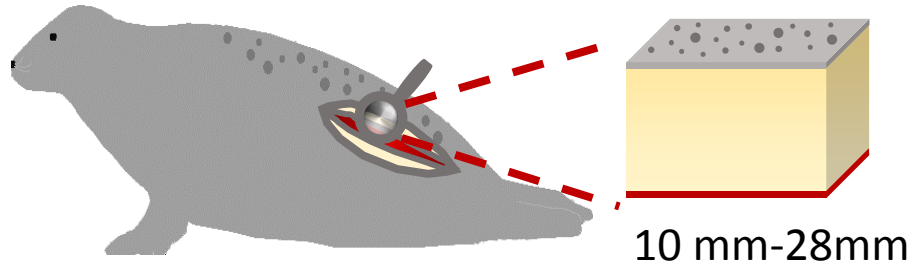


# Is blubber hypoxic?

First measurements of dissolved oxygen in a natural animal model of rapid fat tissue expansion

Laura Oller, Joel Rocha, Kimberley Bennett



$$pO_2 = \text{systemic blood saturation} * \text{Depth fraction} * \text{blubber fat content (\%)}$$

Blubber pO<sub>2</sub> falls with increasing tissue depths and fat content

**Figure 1.** Scatter plot of partial pressure of oxygen measurements on seals' blubber depending on depth of measurement. Each individual (ID) is represented by a colour (n=10) and repeated samplings of same animal after weight gain (n=4) are represented by different shapes. Standard error is coloured in grey.