

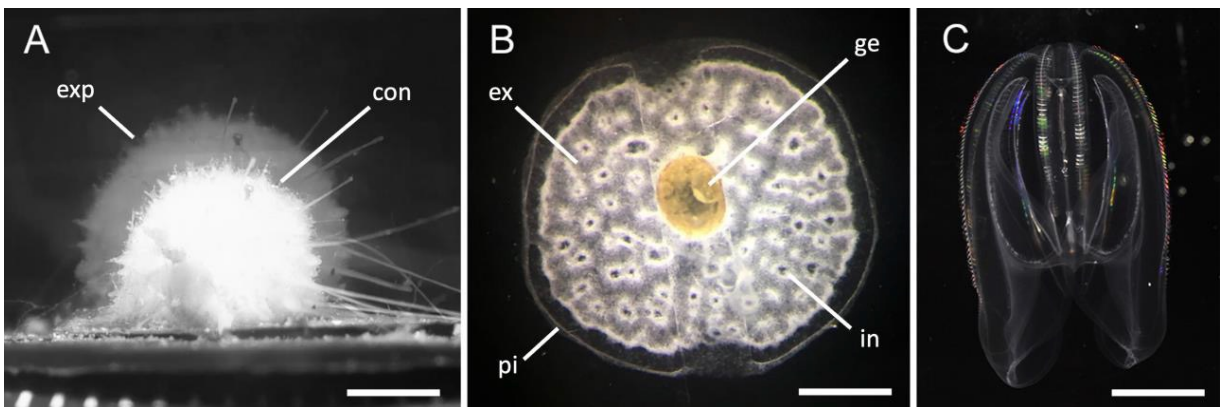


Do sponges sleep?

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Did sleep arise as an energy conserving mechanism, or was the function first related to nervous system maintenance? We are investigating sleep-like behavior in one of the oldest animal lineages, sponges (Porifera). Even though sponges lack muscles, they perform coordinated behaviours such as whole-body contractions. Recently, we showed diurnal variability in this behaviour. Our goal is to clarify if this is sleep. Demonstrating sleep in sponges could change our fundamental understanding of sleep, since it would suggest that sleep was present in the common ancestor to animals, and that the core function is likely unrelated to the nervous system since sponges lack neurons.



**Friday, January 13th at 13.00 in the
Zoophysiology Seminar Room (1131-127)**