

Consider the reticular formation of a human vs. the reticular formation of a fish. What functions would you expect to be similar? What functions might you expect to be different?

One aspect of the reticular formation is that its neurons tend to respond to a wide variety of sensory stimuli. This contrasts with sensory neurons (e.g. lateral geniculate nucleus or of the cochlear nuclei) that respond strictly to one modality or another. Does the broad responsiveness of reticular neurons appear to relate to their functions in any way?

Despite decades of work, we still don't completely understand control of respiration. Sketch out what you know of what we DO understand. What important aspects do we NOT understand?

Do the same thing for cardiovascular control.

Lesions of the pons and midbrain can result in an animal (or person) that is in an unresponsive coma-like state. What is known of the causes of this condition?

True or False: Sleep is a state of decreased neural activity in the brain. Explain.