

*Don Pfaff, Question:*

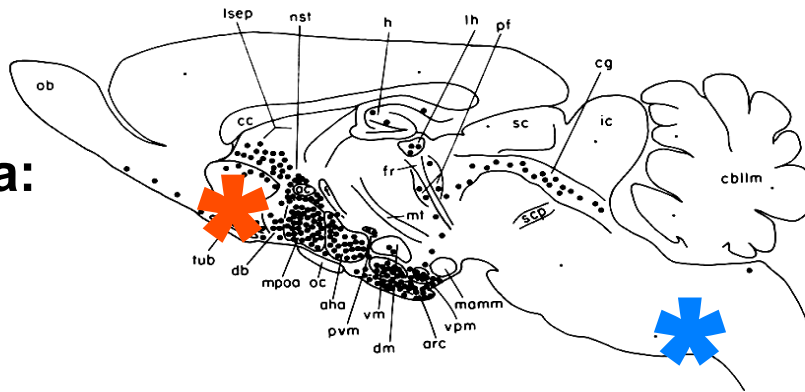
# How do we regulate changes in state of CNS arousal?

Perspective:

20th C. Neuroscience="Hunt for specificity."

21st C. Neuroscience= Explain CNS states." ?

Conundra:



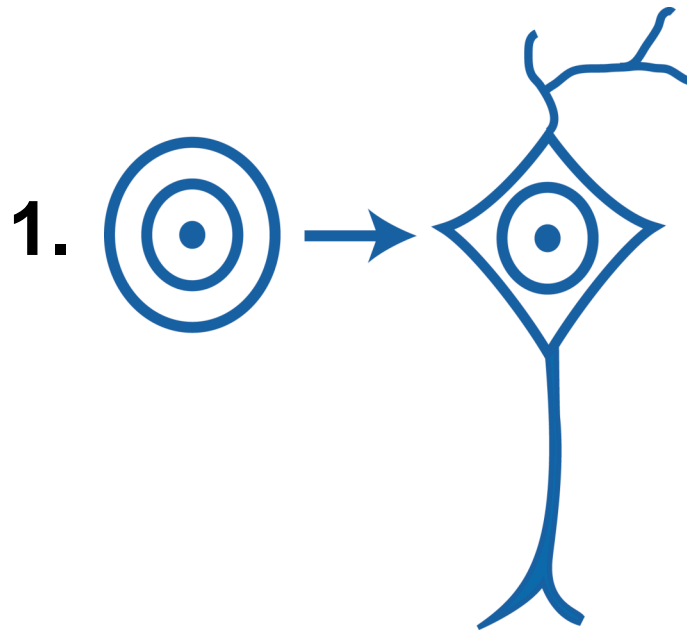
1. Hypothalamus "vs." medulla?

2. Medullary RF → atonia?

Ask: 1. How to achieve large changes of state rapidly while maintaining control?

2. Which mathematical & simulation tools will allow formal analysis & description?

*Don Pfaff, Two questions, outside my area of research:*



**What are the first cellular mechanisms leading to polarization during development?**

**2. How do we handle the non-linearities of neuronal dynamics?**