



# Computational Neuroscience

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# YOURS FOR THE TAKING

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Why listen to a sermon on CNS?

Where we've come and where we're headed

"Back to biology" friends!

Am I doing something worth talking about

'Round the globe – worthy mentions

A pinch of motivation ... Perhaps?

AND  
THE  
STORY  
BEGINS

...

Buzzwords!

Solid backing?

Do we even  
know enough?

Models and  
their  
implications

Some irony  
for you 😊

Delve a little  
deeper ...

# ADVANCES IN CNS

Measurements:  
Where does  
data come  
from?

Voltage clamp

Hodgkin  
Huxley

Recording  
techniques

Neuron  
activity

Wait a sec . . .  
*Activity?*

Potentials

Channels

Pumps and diffusion

Gradients

Action potential

Revisit Hodgkin Huxley

# A PAGE FROM THE BIO-BAG



# THESIS TIME

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- Olfaction and the piriform cortex
- Data – nature, quantity, quality
- Identifying patterns – enter ML
- Approaches in literature
- Why is stuff this hard!
- So what ... ?

# CHAT TIME!

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Suspicious  
about ML

Decoding vs  
Encoding

Extensions  
from thesis

# CNS WORLD – AT YOUR DOORSTEP

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- Sensory systems
- Learning & Memory
- Neurobiology of time!



# CHAT TIME AGAIN!

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THAT'S ALL FOLKS

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