The CCNLab Strategy and Mission:

Give rise to a diverse range of phenomena..

Bridging Levels:

Computational / math:
- Boltzmann machines
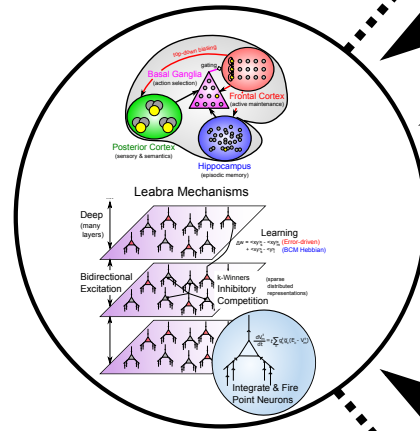- Deep nets, SRN's..
- Bayes?

"It must *work*!"

Seek synergies in the "golden middle"

"It must be *true*!"

Biological:
- Neocortical lamina
- Thalamocortical loops
- Area specializations (hippo, pfc, bg..)
- STDP, inhibition, neuromodulation...

Core learning & dynamics mechanisms

Perception
 Object recognition

Attention
 Visual search

Motor control

always feed back to core

Learning & Memory
 Hippocampus

 (deep exploration of specific domains to really push on mechanisms)

Language

Executive Function
 PFC / BG WM

....

always feed back to core

AI / Applications:
- embodied robots
- automated sensemaking
- high accuracy object recognition
- ...