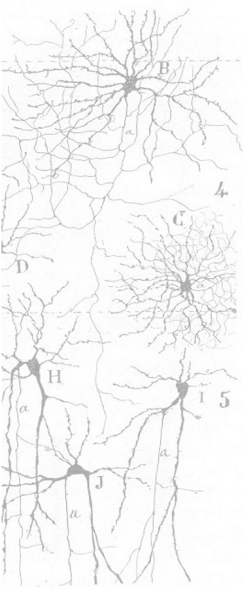
CUNY Neuroscience Collaborative Seminar Series
SPRING 2024

Friday, March 22nd, 3:00 - 4:30 PM
The CUNY Graduate Center, Rm. 6495



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Prior experience shapes our perception: the role of statistical regularities

It has been known for some time that prior knowledge shapes our perception and there is a long tradition in psychology of framing perception as a process of generating and then verifying a perceptual hypothesis. Here I discuss the proposal that the perceptual hypothesis, or prediction, takes the form of learned statistical regularities. In particular, I will describe evidence that real-world statistical regularities, i.e. regularities built up over a lifetime, not only affect our ability to recognize images but to detect their presence. I will also show that, consistent with predictive coding models, statistically irregular images evoke more visual activity than statistically regular ones and that while this difference is context dependent, it does not require full attention. Together the results support models of perception in which the visual system generates and then verifies a prediction.

In-person

Hosts: **Dr. Nesha Burghardt (nb844@hunter.cuny.edu) and Dr. Asohan Amarasingham (aamarasingham@ccny.cuny.edu)**

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