# **INES AITSAHALIA**

#### PHD CANDIDATE

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#### **EDUCATION**

2022-Present (est. 2027) Columbia University, Center for Theoretical Neuroscience

PhD in Neurobiology and Behavior
MA in Neurobiology and Behavior

2018-2022 Princeton University

BA in Neuroscience, Cognitive Science

Graduated with Honors and John Brinster, Class of 1943, Senior Thesis

Prize

#### RESEARCH EXPERIENCE

2024-Present	Iigaya Lab & Stachenfeld Lab Columbia University
	PhD Candidate
2023	Miller Lab, Center for Theoretical Neuroscience at Columbia University
	PhD Student Researcher (Rotation)
2022	<b>Horga Lab,</b> Columbia University and New York State Psychiatric Institute
	PhD Student Researcher (Rotation)
2022	<b>ligaya Lab,</b> Columbia University and New York State Psychiatric Institute
	PhD Student Researcher (Rotation)
2020-2022	Niv Lab, Princeton University
	Undergraduate Research Assistant
	Summer Research Intern

### PUBLICATIONS & PRESENTATIONS

Sparse Cognitive Graphs: Linking dopamine to cognitive	2025, in prep	
map through reinforcement learning		

A. Gungi, P. Sepulveda, I. Aitsahalia, K. Iigaya

Anticipatory value computation as a new transdiagnostic target 2024, PsyArXiv

P. Sepulveda, I. Aitsahalia, K. Kumar, T. Atkin, K. Iigaya

"A multi-level latent cause framework for the study of delusions" 2025

I. Aitsahalia, G. Horga, K. ligaya poster at CPC

## Building Deterministic Causal Graphs Using Reinforcement Learning in Cognitive Tasks with Evolutionary Bias

2024, conference paper CCN

I.Aitsahalia, A. Gungi, P. Sepulveda, K. Iigaya

**Book Chapter: Computational Psychiatry and Eating Disorders** 

2023, in prep

P. Sepulveda\*, I. Aitsahalia\*, S. Dong\*, K. Iigaya (\*denotes co-first authors)

"Unified anticipation model can explain information-seeking around negative outcomes"

2024

I. Aitsahalia, P. Sepulveda, V. Fisher, S. Dong, K. Iigaya

poster at CPC

"Common cause inference as a generative model of delusions"

M.Schafer, A. Velikosvkaya, I. Aitsahalia, K. ligaya, G. Horga

2024 poster at CPC

"Bridging reinforcement learning and causal inference: 2024

Emergence of gride cells in abstract tasks"

poster at COSYNE

A. Gungi, P. Sepulveda, I. Aitsahalia, M. Schaffer, K. Iigaya

"Information seeking around aversive outcome anticipation"

2023

2023

2023

2023

I. Aitsahalia, P. Sepulveda. S. Dong, R. Chen, Y. Chai, K. Iigaya poster at SfN

"Computation of Anticipatory Value as a New Transdiagnostic Target"

I. Aitsahalia, P. Sepulveda, K. Kumar, K. Iigaya

poster at CPC

"Alterations in Perceptual Learning Drive Speech Hallucinations

in Medication-Free Patients with Schizophrenia"

poster at CPC

J. Buck, I. Aitsahalia, D. Serrano, G. Horga

"Why do some beliefs and behaviors resist updating?"

S. Pisupati, I. Aitsahalia, S.N. Quinard, I.M. Berwian, A.J. Langdon, Y. Niv

poster at Computational Psychiatry Conference (CPC)

"Latent-cause inference under varying beliefs about

randomness captures individual differences in fear extinction"

2022

poster at SfN

"Over- and under-segmentation of latent causes lead to different types

of extinction failures"

2021

I. Aitsahalia, S. Pisupati, S.N. Quinard, I.M. Berwian, Y. Niv

I. Aitsahalia, S. Pisupati, S.N. Quinard, I.M. Berwian, Y. Niv

poster at Society for Neuroscience (SfN)

## TEACHING & SERVICE

2025	Committee on Rigor, Neurobiology and Behavior
	Columbia University
2024	Preventing and Managing PTSD, certification
2023, 2024, 2025	Course Instructor, Math Tools for Theoretical Neuroscience
	Columbia University
2023-2024	Course Instructor, Mind/Brain Disorders
	Barnard College
2023, 2025	Teaching Assistant, Analysis for Neuroscientists
	Columbia University
2023-2024	Teaching Assistant, Introduction to Cognitive Science
	Barnard College
2022-Present	Women on Two Floors
	Affinity group for women in computational neuroscience at Columbia
2021-2022	Subcommittee on Inclusive Teaching
	Princeton University
2022-Present	Dragonfly Mental Health
2021-2022	<b>Empowering Diversity and Promoting Scientific Equity at PNI</b>
	Princeton Neuroscience Institute
AWARDS	
2024-2025	Lead Teaching Fellow, Columbia University Center for Teaching and Learning
2022-Present	NSF Graduate Research Fellow, Cognitive Science
2022	Knox Studentship, Cambridge University
	Offer declined
2022	Rhodes Scholarship semifinalist, Oxford University
2022	John Brinster, Class of 1943, Senior Thesis Prize, Princeton University
2022	Lewis Center Class Day Award, Princeton University
2021	Nancy J. Newman, MD '78 & Valerie Biousse, MD Research Fund for Neuroscience, Princeton University
2021	<b>Program in Cognitive Science Summer Research Award,</b> Princeton University