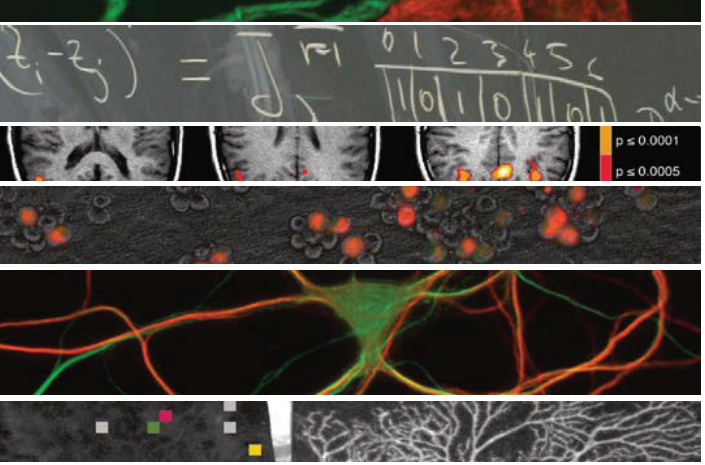

We seek highly motivated and creative students in our efforts to understand the brain.

A unique and intensive program of study followed by advanced research in a world class Princeton laboratory.

- Pioneer new experimental techniques
- Develop cutting-edge analytical tools
- Discover how the brain works

MOLECULAR
DEVELOPMENTAL
BEHAVIORAL
COMPUTATIONAL

PNI FACULTY RESEARCH INTERESTS

MICHAEL BERRY
Neural computation in the visual system

WILLIAM BIALEK
Interface between physics and biology

LISA BOULANGER
Neuro-immune interaction in brain health and disease

CARLOS BRODY
Quantitative and behavioral Neurophysiology

TIM BUSCHMAN
Neural dynamics of cognitive control

JONATHAN COHEN
Neural bases of cognitive control

NATHANIEL DAW
Reward learning and decision making, computational psychiatry

LYNN ENQUIST
Neurovirology

ANNEGRET FALKNER
Neural circuits for social behaviors

LIZ GAVIS
mRNA localization and translational control in dendrite morphogensis

ALAN GELPERIN
Learning, memory and olfaction

ASIF GHAZANFAR
Neuromechanics and communication

ELIZABETH GOULD
Neurogenesis and hippocampal function

MICHAEL GRAZIANO
Brain basis of consciousness

URI HASSON
Hierarchy of processing timescales and brain-to-brain communication

SABINE KASTNER
Neural basis for visual attention
Comparative primate electrophysiology

ANDREW LEIFER
Whole-brain neural dynamics underlying behavior

CAROLYN MCBRIDE
Molecular and neural basis of behavioral evolution

MALA MURTHY
Neural mechanism of sensorimotor integration and behavior

COLEEN MURPHY
Molecular mechanisms of aging

YAEL NIV
Learning and decision making, computational psychiatry

KEN NORMAN
Cognitive neuroscience of learning and memory

JONATHAN PILLOW
Neural information processing, machine learning, and statistical modeling of neural data

SEBASTIAN SEUNG
Structure and function of neural circuits

JOSHUA SHAEVITZ
Neural and behavioral dynamics in simple organisms

DAVID TANK
Neural circuit dynamics

JORDAN TAYLOR
Motor control and learning

ALEXANDER TODOROV
Cognitive neuroscience of social cognition and behavior

SAMUEL WANG
Dynamics and learning in neural circuits

ILANA WITTEN
Neural circuits underlying reward

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PRINCETON
Neuroscience
INSTITUTE

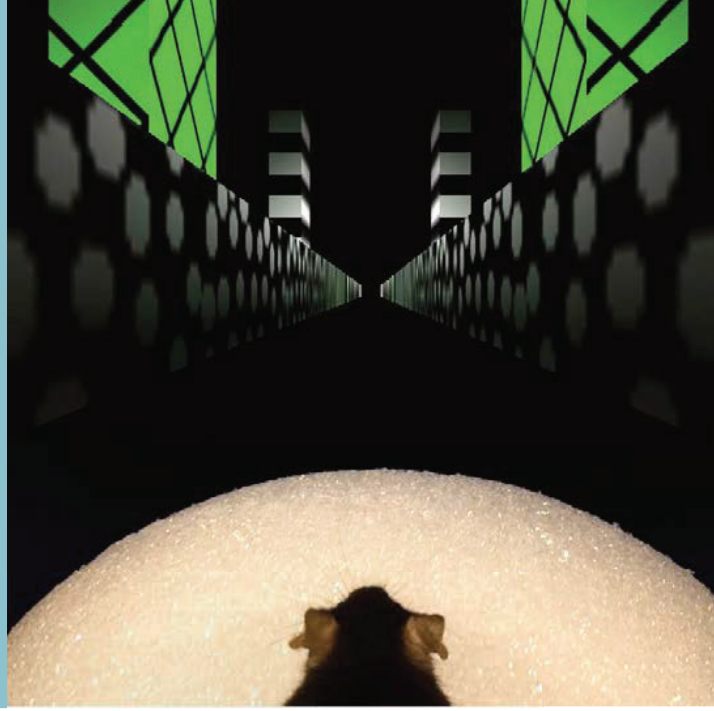
Ph.D.

Program

MOLECULAR
DEVELOPMENTAL
BEHAVIORAL
COMPUTATIONAL
COGNITIVE
NEUROSCIENCES

QUANTITATIVE/COMPUTATIONAL TRACK

Across the board, from molecular biology to physics to psychology, and including neuroscience, Princeton research is particularly strong in theoretical and quantitative approaches. In recognition of this, a Quantitative and Computational Neuroscience track exists within the Neuroscience Ph.D. Students in this track take elective courses in quantitative disciplines, and perform Ph.D. research in quantitative and/or computational neuroscience. Faculty within PNI and within Mathematics, Physics, Electrical Engineering, and Computer Science are part of the QCN track. Students from quantitative fields wishing to enter neuroscience are strongly encouraged to apply to our Ph.D.



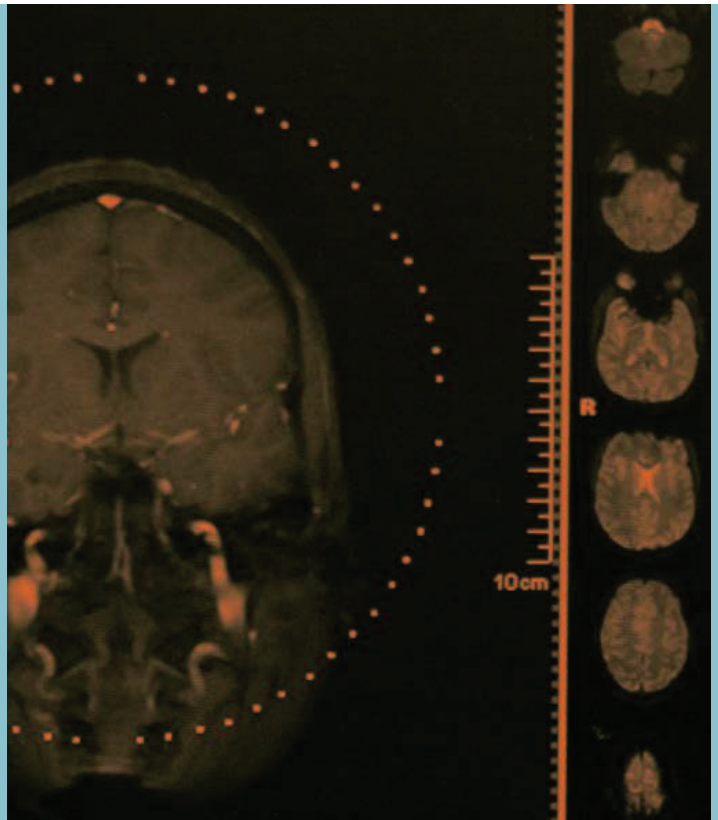
PRINCETON NEUROSCIENCE INSTITUTE – PhD Program

A UNIQUE COURSE OF STUDY

The core course in the new Princeton Neuroscience Ph.D. program is designed to give students a solid, hands-on grounding in advanced neuroscience before they specialize in their research. This in-depth course is unique in its emphasis on combining experiments and computation with lectures. All students carry out experiments themselves: from single neurons and patch clamp, to in vivo electrophysiology in behaving animals, to computational modeling, to human neurophysiology and functional MRI, this course guides and teaches students about the brain as they learn to design, perform, analyze, and critique their own experiments.

CUTTING-EDGE RESEARCH

Coursework is followed by Ph.D. thesis research in one of the PNI faculty labs. Students rotate in up to three labs before choosing one in which to do their research.



STRONG FINANCIAL SUPPORT

All admitted students receive full financial support for the duration of their Ph.D., including tuition, a competitive stipend, and health benefits. This support typically is made possible through a combination of funds from Princeton University, federal grants to PNI, private donations, and grants to faculty members.

FOR MORE INFORMATION ON OUR DOCTORAL PROGRAM IN NEUROSCIENCE, PLEASE CONTACT THE FOLLOWING:

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