

Rose Ying

P: +1 (908) 655 1725
E: roseying@umd.edu

Detail-oriented and creative scientist with a neurobiology background and 5+ years of research experience in rodent behavior, neurocircuitry, and pharmacology. Enthusiastic and curious to discover more about communication behaviors, systems neurobiology, and neuroethology. Currently a graduate student in the Neuroscience and Cognitive Science (NACS) program at the University of Maryland.

Education

UMD COLLEGE PARK
Aug 2020 – Present

Expected PhD in Neuroscience and Cognitive Science
Principle investigator: Melissa Caras

**WAKE FOREST
UNIVERSITY**
Aug 2013 – May 2017

B.S. in Biology (with Honors); Minor in Linguistics
Principal Investigator: Wayne Pratt
Project: Effect of the CB1 neutral antagonist AM4113 on palatable food motivation

Experience

UMD COLLEGE PARK
Aug 2020 – present

GRADUATE RESEARCH ASSISTANT (Melissa Caras, Department of Biology)
Researching auditory learning and plasticity in gerbils. Specifically looking to determine the role of inferior colliculus on auditory cortex plasticity during perceptual learning.

UNC CHAPEL HILL
Sep 2018 – Aug 2020

RESEARCH TECHNICIAN (Melissa Herman, Department of Pharmacology)
Conducted research related to alcohol and nicotine abuse disorders, such as behavioral studies on sex differences in alcohol consumption and viral manipulation of central amygdala circuits on depressive-like behaviors.

UNC CHAPEL HILL
May 2017 – Sep 2018

RESEARCH TECHNICIAN (Garret Stuber, Department of Psychiatry)
Worked on projects investigating neurocircuitry of addiction and reward processing, including optogenetic manipulation of D1 dopamine receptors in a real-time place-preference assay and analysis of reward circuitry showing neurons from PFC and LHA input to PVT-NAc neurons.

**WAKE FOREST
UNIVERSITY**
Aug 2014 – May 2017

UNDERGRADUATE HONORS STUDENT (Wayne Pratt, Department of Psychology)
Investigated palatable feeding behaviors in rats; performed pharmacological manipulation of CB1 receptors on palatable food intake and cue-induced reinstatement.

Awards

SYNAPSE TRAVEL GRANT, College of Charleston, 2017
SUMMER RESEARCH FELLOWSHIP, Wake Forest University, 2015

Publications

Agoglia A, Zhu M, **Ying R**, Sidhu H, Natividad L, Wolfe S, Buczynski M, Contet C, Parsons L, Roberto M, Herman M (2020) Corticotropin Releasing Factor Receptor-1 neurons in Lateral Amygdala display selective sensitivity to acute and chronic ethanol exposure. *eNeuro*. 7(2):ENEURO.0420-19.2020.

Otis JM, Zhu M, Namboodiri VM, Cook CA, Kosyk O, Matan AM, **Ying R**, Hashikawa K, Trujillo-Pisanty I, Guo J, Ung RL, Rodriguez-Romaguera J, Anton ES, Stuber GD (2018) Paraventricular thalamus projection neurons integrate cortical and hypothalamic signals for cue-reward processing. *Neuron*. 103, 1-9.

Ying R, Gallagher S, Vemuri K, Makriyannis A, Pratt WE. A comparison of the effects of peripheral- and central-acting CB1 receptor antagonists on palatable feeding and cue-induced reinstatement of sugar-seeking. *Under revision*.

Presentations

"Effect of the CB1 neutral antagonist AM4113 on palatable food motivation", Symposium for Young Neuroscientists and Professors of the SouthEast (SYNAPSE), Presbyterian College, Clinton, SC, March 2017.

"A comparison of the effects of peripheral or centrally-active CB1 receptor antagonists on palatable feeding and cue-induced reinstatement in the rat". Poster presented at SfN Neuroscience, San Diego, CA, Nov 2016.

Skills

BEHAVIORAL PARADIGMS

Operant conditioning
Cue-induced reinstatement
Novelty-induced suppression of feeding
Real-time place preference w/ optogenetics
Two-bottle choice drinking assay

RODENT SURGICAL PROCEDURES

Cannula implantation (intracranial)
Optical fiber implantations (intracranial)
Viral injections (intracranial)
Perfusions

MICROSCOPY

Confocal and fluorescence microscopy

DATA ANALYSIS

GraphPad Prism
IBM SPSS
R

MOLECULAR BIOLOGY

Genotyping (gel electrophoresis PCR, qPCR)
In situ hybridization (RNAscope)

WEB AND GRAPHIC DESIGN

Adobe Illustrator
Adobe Photoshop
HTML5/CSS3
Javascript

References

GARRET STUBER

E: gstuber@uw.edu
P: +1 (206) 685 5517

MELISSA HERMAN

E: melher@email.unc.edu
P: +1 (919) 445 3856

WAYNE PRATT

E: prattwe@wfu.edu
P: +1 (336) 758 5745