

WELCOME TO  
**NEURO NEWS**

*SPECIAL EDITION*

## NEUROSCIENCE PROGRAM HIGHLIGHTS

*Check out the recent achievements from the Neuroscience Program!*

Welcome to the special edition of **Neuro News**, focusing on recent happenings in the Neuroscience Program! This edition will come out once per year so keep track of important events in your lab to include next year.

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### Congratulations to the Neuroscience Program's 10 successful PhD defenses in 2023-2024!

- Dr. Eric Barnett, Faraone Lab - Postdoctoral research associate in the Faraone Lab  
*"Context matters: Using genomic knowledge to improve disorder classification models"*
- Dr. Andrew Brawner, Y. Lin Lab - Visiting Assistant Professor of Neuroscience at Colgate University  
*"DevATLAS: A novel tool to monitor the sequence of neural circuit development and study neurodevelopmental disorders"*
- Dr. Rujia Dai, Liu Lab - Postdoctoral research associate in the Liu Lab  
*"Unveiling cell-type-specific transcriptome and genetic regulation in postmortem brains of schizophrenia patients"*
- Dr. Josh Enck, Olson Lab - Postdoctoral research associate in the Olson Lab  
*"First contact: the discovery of a transient neural circuit that shapes cortical development"*
- Dr. Jiahui Hou, Glatt Lab - Postdoctoral research associate in Glatt Lab  
*"Finding diamonds in the rough: Uncovering genetic variants, transcripts, and biological processes associated with resilience to Alzheimer's Disease"*
- Dr. Sam LaMagna, Solessio Lab - Completing medical school as part of MD/PhD program  
*"The murine absolute visual threshold: Behavior & retinal pathways"*
- Dr. Yu Liu, Hu Lab - Product scientist at Cell Signaling Technology  
*"Exploring the roles of the connecting cilium in photoreceptor health"*
- Dr. Ryan Mokhtari, Howell Lab - Lecturer at Univ. of Tennessee, Knoxville  
*"IPSC-derived neurons as a model for studying the role of RELN in autism"*
- Dr. Jacqueline Thompson, Y. Lin Lab - Postdoctoral fellow at JHU Bloomberg School of Public Health  
*"Characterizing dentate gyrus granule cell development and why it matters"*
- Dr. Yunting Zhu, Weickert Lab - Postdoctoral research associate in the Weickert Lab  
*"The neuroinflammatory basis of schizophrenia and bipolar disorder: spotlight on brain macrophages, cytokines, and the blood-brain barrier"*

Fall 2024 edition

**REMEMBER!** Email photos, news, and achievements from your lab at any time during the year to Drs. Karen Boschen & Tom Gamage to include in next year's issue!

## Recent Awards and Honors



**Dr. Yunting Zhu (Weickert):**  
Nominated for SUNY  
Distinguished Dissertation  
Award



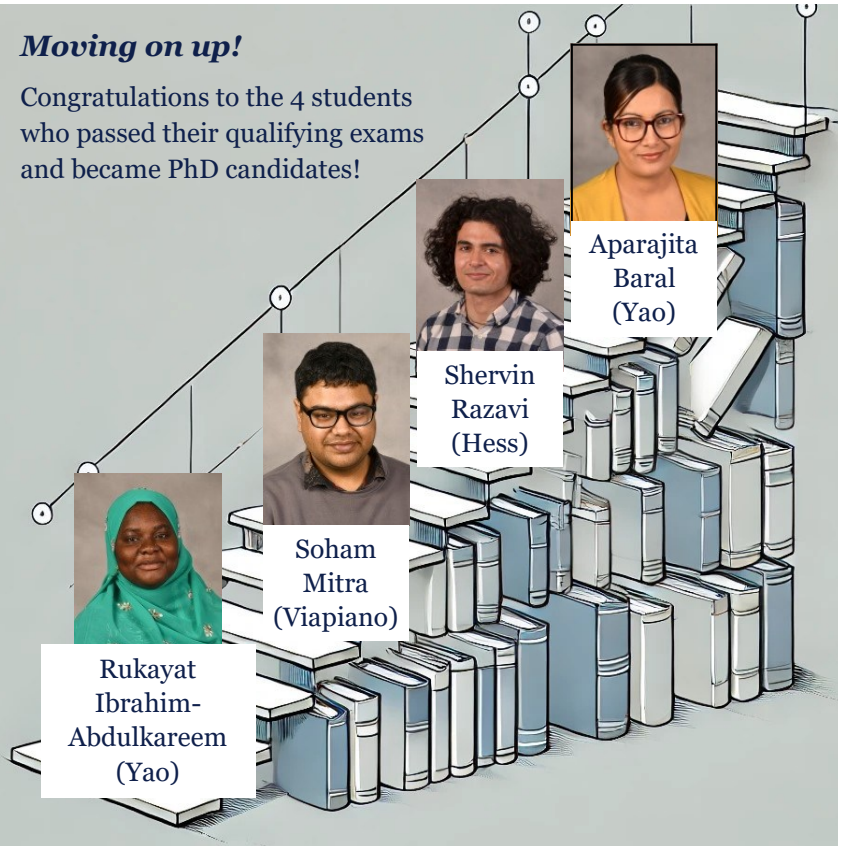
**Ana Strat (Ganapathy):**  
Exceptional Poster, UNY MPSS  
Symposium; 2nd Place Presenta-  
tion, Stevenson Biomaterials  
Lecture Series, Syracuse U.



**Aya Kobeissi (Yao):**  
2nd place, 3MT competition

## Moving on up!

Congratulations to the 4 students  
who passed their qualifying exams  
and became PhD candidates!



**Aparajita  
Baral  
(Yao)**



**Shervin  
Razavi  
(Hess)**



**Soham  
Mitra  
(Viapiano)**



**Rukayat  
Ibrahim-  
Abdulkareem  
(Yao)**

## Welcome to Neuroscience Program 2024 students!

Seven students joined the Program to complete their  
PhD following rotations:



**Sucheta  
Bhattacharya  
(Todd Lab)**



**Jack Cimino  
(Weickert Lab)**



**Jugasmita Deka  
(Todd Lab)**



**Joslyn Doupe  
(Olson Lab)**



**Md. Saddam  
Hossein  
(Wong Lab)**



**Rasul Rahkshan  
(Calvert Lab)**



**Jingyu Zhou  
(Yao Lab)**

### Fall 2024 direct admits:

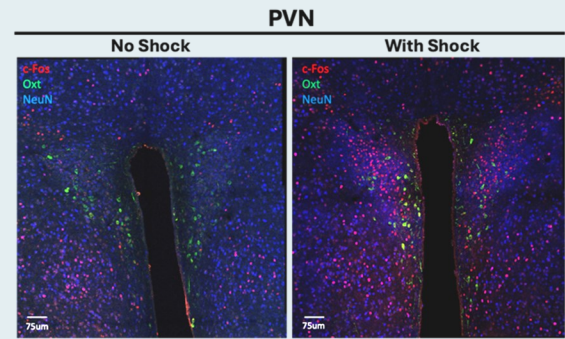
Chelsea Hsiao (Lin Lab)  
Song Li (Zhao Lab)  
Matthew Krause (Calvert Lab)  
Georgiana Kobzeff  
Jessie Jin

### Recent first author publications from trainees:

- ◇ **Dr. Rujia Dai (Liu):** Evaluating performance and applications of sample-wise cell deconvolution methods on human brain transcriptomic data, *Sci Adv*, DOI: 10.1126/sciadv.adh2588
- ◇ **Dr. Josh Enck (Olson):** Calcium signaling during cortical apical dendrite initiation: A role for Cajal-Retzius neurons, *Int J of Mol Sci*, DOI: 10.3390/ijms241612965
- ◇ **Dr. Jiahui Hou (Glatt):** Polygenic resilience scores capture protective genetic effects for Alzheimer's disease, *Trans Psych*, DOI: 10.1038/s41398-022-02055-0
- ◇ **Dr. Sam LaMagna (Solessio):** Signal detection theoretic estimates of the murine absolute visual threshold are independent of decision bias, *eneuro*, DOI: 10.1523/ENEURO.0222-24.2024
- ◇ **Dr. Yunting Zhu (Weickert):** Increased prefrontal cortical cells positive for macrophage/microglial marker CD163 along blood vessels characterizes a neuropathology of neuroinflammatory schizophrenia, *Brain, Beh & Immun*, DOI: 10.1016/j.bbi.2023.03.018
- ◇ **Ana Strat (Ganapathy):** Engineering a 3D hydrogel system to study optic nerve head astrocyte morphology and behavior, *Exp Eye Res*, DOI: 10.1016/j.exer.2022.109102
- ◇ **Shervin Razavi (Hess):** Appraisal of gene expression-based classifiers for neuropsychiatric disorders: A meta-regression, *medRxiv*, DOI: 10.1101/2024.10.02.24314719

## FIRST F99/K00 AT UPSTATE AWARDED TO NEUROSCIENCE PROGRAM STUDENT!

*Aya Kobeissi* has been awarded an F99/K00 transition grant from NINDS, the first in Upstate's history! This grant funds 2 years of graduate work and 4 years of postdoctoral training and will support Aya's work "Prefrontal Cortical Circuits in Aging and Frontotemporal Dementia." Currently in the lab of Dr. Wei-Dong Yao, Aya's research focuses on how neuronal activity and associated molecular signatures change across the lifespan and contribute to frontotemporal dementia (FTD), a neurodegenerative disease characterized by severe behavioral and personality changes, including loss of empathy. Aya's work has shown that a single dose of oxytocin can restore empathy-driven compassion in an FTD mouse model, which provides a novel, non-invasive potential avenue of treatment. Development of novel therapeutics relies on understanding the mechanisms that mediate the behavioral symptoms of FTD, like loss of empathy. When asked, Aya highlighted the exciting new "tools [that] have been developed that allow us to probe neural, molecular, and synaptic circuits and mechanisms with high specificity in awake, behaving animals." New technologies, collaborations across fields and labs, and dedicated researchers are necessary to continue to drive the field of FTD research forward.



*Oxytocin and c-Fos increase in the mouse hypothalamus after footshock. Credit: A. Kobeissi*

## UPSTATE NEUROSCIENCE: OUT AND ABOUT

### NEUROSCIENCE PROGRAM RETREAT, 2023:

Faculty, students, and staff enjoy talks, lunch, and a poster session at the Craftsman Inn.



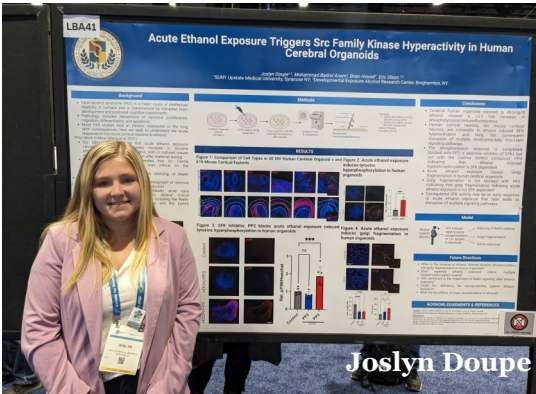
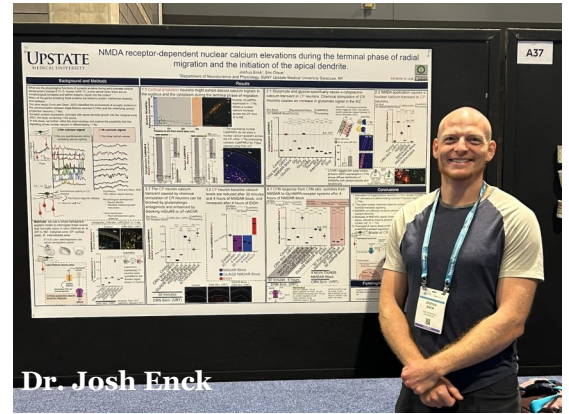
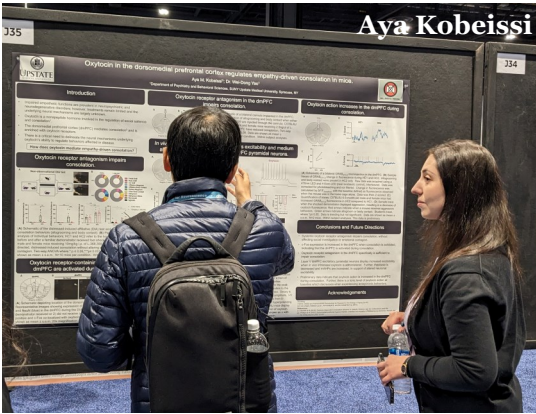
### 2023 Award Winners

- ◇ Academic Excellence: Dr. Josh Enck & Dr. Jacqueline Thompson (Tie)
- ◇ NeuroCommunity Spirit: Ana Strat
- ◇ Best 3-Min Talk: Meizhen Meng
- ◇ Best Poster: Dr. Andrew Brawner
- ◇ Postdoctoral Mentorship: Dr. Tushar Yelhekar
- ◇ Honorable Mentions:
  - ◇ Dr. Rujia Dai (Academic Excellence)
  - ◇ Aya Kobeissi (NeuroCommunity Spirit)

**STAY TUNED TO FIND OUT WHO WILL WIN THIS YEAR!**



CONGRATS DR. DAI!  
Drs. Rujia Dai,  
Chunyu Liu, and  
Richard Kopp (R to L)  
celebrate Dr. Dai's  
successful dissertation  
defense.



**Join us next year!**

**Trainees at SfN 2024:**  
 November 15-19, 2025  
 San Diego, CA

Dr. Josh Enck (Olson)  
 Joslyn Doupe (Olson)  
 Yike Huang (Wong)  
 Aya Kobeissi (Yao)  
 Jugasmita Deka (Todd)  
 Sucheta Bhattacharya (Todd)

