## 2025 UVA Brain Retreat

## **Poster List**

Poster #	Name(s)	Role(s)	Poster Title	Time
1	Selena Akay	Undergraduate student	Neuronal polarity and structure are not disrupted by binucleation	11am- noon
2	Reza Ghorbani Alikelayeh	Graduate student	2D CAIPI accelerated 3D multi-slab diffusion- weighted EPI combined with qModeL reconstruction for fast high-resolution microstructure imaging	11am- noon
3	Everett Altherr	Postdoctoral Scholar	Behavioral Outcomes in a Mouse Model of Febrile Status Epilepticus	noon- 1pm
4	Samantha Barnett	Undergraduate student	The Effect of Sibling Relationships on Entropy in Infants' Brains	noon - 1pm
5	Charly Beasley	Undergraduate student	Investigating the Association Between Sibling Composition and ADOS Risk Levels	11am- noon
6	Daniel Beck	Staff	Man vs. Machine: Can Al Rival Neurosurgeons in Targeting the VIM for Focused Ultrasound Thalamotomy?	noon- 1pm
7	Eva Campbell	Undergraduate student	Exploring the Role of Microglia in Engram Representations of Social Memories	11am- noon
8	Sheng Chen	Graduate student	Simultaneous Skull and Brain Monitoring in Transcranial MRgFUS Surgeries Using a 3D Stack-of- Spirals Sequence	11am- noon
9	Chen Chen	Graduate student	Accessing genetically defined cell types in the Superior Colliculus with transgenic mouse lines	noon- 1pm
10	Nicholas Cormas	Undergraduate student	Regulation of Microglial Immune Functions by SHP-1 in Multiple Sclerosis	noon- 1pm
11	Veronica Coyle	Graduate student	Investigating the role of Cd59 in oligodendrocyte development	11am- noon
12	Hayley Dingsdale	Postdoctoral Scholar	Genetic mosaic analysis of abscission genes Cep55 and Kif20b in the developing cortex	11am- noon
13	Emily Douglas	Undergraduate student	The Influence of Feeding Type on Language Development in Premature Infants	11am- noon
14	Selena Garcia DuBar	Postdoctoral Scholar	Activation of Periaqueductal Gray Neurons Proximal to Kindled Seizures that Present with Apnea	11am- noon
15	Tai Ferree	Undergraduate student	Investigating the genetic basis of variation in neural stem cell reactivation in Drosophila melanogaster.	noon- 1pm
16	Weronika Gniadzik	Graduate student	ApoE2 Protects Against Neurodegeneration by Alleviating Translational Stress Induced by Tau Pathology	noon- 1pm

Poster #	Name(s)	Role(s)	Poster Title	Time
17	Reyhan Haider	Undergraduate student	A Comprehensive LC-MS Metabolomics Approach Reveals a Novel Panel of Markers in an APOE4 Mouse Model of Alzheimer's Disease	noon- 1pm
18	Chaitali Harge	Staff	Profiling cerebrospinal fluid metabolites in traumatic brain injury and stroke	11am- noon
19	Elise Harris	Undergraduate student	Prefrontal-Alpha Asymmetry as a Moderator Between Infant Temperament and Toddler Development	11am- noon
20	Syeda Amrah Hashmi	Research Fellow	Co-Morbid Seizures in Frontotemporal Dementia: What Do They Tell Us?	noon- 1pm
21	Xin He	Undergraduate student	TEST-RETEST RELIABILITY: PH-BASED STRUCTURAL CONNECTIVITY	noon- 1pm
22	Timothy Ho	Graduate student	Susceptibility Source Separation MRI Development for Mouse Brain Applications	11am- noon
23	Ava Hogan	Research Assistant	Impact of Gestational Age at Birth on Functional Connectivity of Memory and Inhibitory Control Systems in Preterm Neonates: Whole-Network Analysis	noon- 1pm
24	Silky Hou	Staff	Assessment of extracellular matrix and perineuronal nets in epilepsy	11am- noon
25	Sarah Hunter- Chang	Graduate student	Axonal spheroid engulfment by phagocytic glia regulates axon degeneration	noon- 1pm
26	Marissa Incer	Staff	Mechanisms of Sudden Death in a Mouse Model of Tuberous Sclerosis Complex	noon- 1pm
27	Anna Jesus	Faculty	Hummingbird-HOPE Pilot Study: Measuring Hope in the Context of Progressive Illness	11am- noon
28	Bhadra Kadangal & Evelyn Gouldin	Undergraduate students	Role of hippocampal perineuronal nets in social memory in mice.	noon- 1pm
29	Zoe Kitchings	Undergraduate student	Predicting Neurodevelopmental Outcomes in Preterm Infants Using Maternal-Neonatal Determinants and Perinatal Interventions During Neonatal ICU Admission	11am- noon
30	Lauryn Kumpe	Undergraduate student	Self-Reported Valence and Arousal Responses to Neutral Visual Stimuli are not Influenced by Preceding Exposure to Positive or Negative Tactile Stimuli	noon- 1pm
31	Gabrielle Largoza	Graduate student	MEK signaling as a therapeutic vulnerability of KRAS- driven somatic brain arteriovenous malformations	11am- noon
32	Andrew Latimer	Staff	Oligodendrocyte tmem125b Regulates CNS Myelin Targeting and Growth	noon- 1pm
33	Siwen Liao	Undergraduate student	Art of Brain Data: Neurodiversity Through Aesthetic Data Visualization	11am- noon
34	Katherine Littlejohn	Undergraduate student	Maternal Bonds: Could Postpartum Depression Affect Infant Development?	11am- noon
35	Aida Lopez	Graduate student	P2RY12 REGULATES MICROGLIAL IMMUNO- METABOLIC STATES	noon- 1pm

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36	Beverly Lundeen	Undergraduate student	Neural correlates of language acquisition in infancy	11am- noon
37	Joseph Maliakkal	Graduate student	Effect of Endothelial Cells on Oligodendrocyte Progenitor Cell Morphology	11am- noon
38	Charles Marcucci	Graduate student	Deciphering the role of tenascin-n in peripheral spinal motor nerve development	11am- noon
39	Jessica Medlin	Undergraduate student	The Influence of Feeding Type on Infant Sootheability: Investigating Physical, Auditory, and Visual Soothing Methods	noon– 1pm
40	Emily Miller	Graduate student	Electrochemical detection of serotonin in sert mutant Drosophila larvae	11am- noon
41	Jacqueline Moats	Graduate student	Alterations in Perineuronal Nets within the Hippocampal CA2 Region are Associated with Age- Related Social Memory Dysfunction	noon- 1pm
42	Sebastian Moeller Rivera	Undergraduate student	Characteristics of Subclinical Rhythmic Electrographic Discharges Of Adults (SREDA)	noon- 1pm
43	Stephanie Moy	Graduate student	Role of IL12Rβ2 signaling on OPC differentiation and remyelination	11am- noon
44	Hannah Mulhern	Staff	Targeted neuroprotection via lactate receptor, HCAR1, in neonatal hypoxic ischemic encephalopathy	11am- noon
45	Srikar Mutnuri	Graduate student	Causal Analysis of Graph Signals for Brain Effectome Inference	noon- 1pm
46	Clarissa Nassar	Graduate student	Ciliary Gene Togaram1 Influences Brain Development	11am- noon
47	Omina Nazarzoda	Graduate student	Effects of early-life infection and immune signaling on neuroblast reactivation in Drosophila larvae	11am- noon
48	Ethan Nelson	Graduate student	Digital Organoid: A Biologically Inspired Neural Network for Image Classification	noon- 1pm
49	Ashley Nguyen	Undergraduate student	The 5XFAD mouse model of Alzheimer's disease displays a delayed recovery from Clostridioides difficile infection clinical symptoms	11am- noon
50	Audrey Nguyen	Undergraduate student	Microglial Absence Exacerbates Kainic Acid-Induced Seizures in FIRE Mice	noon- 1pm
51	Greatness Olaitan	Graduate student	Oscillation frequency-dependent modulation of the prefrontal cortex using low-Intensity Focused Ultrasound: impact on downstream mesolimbic dopamine	11am- noon
52	Greatness Olaitan	Graduate student	"Sex Differences in Fentanyl's Impact on Mesolimbic Dopamine Activity"	noon- 1pm
53	Andrew Perl	Graduate student	Jam proteins mediate oligodendrocyte myelin targeting during zebrafish neurodevelopment	noon- 1pm
54	Gray Powell	Undergraduate student	The Gut-Brain Connection: Frontal Alpha Asymmetry in Relation to the Montreal Feeding Scale	noon- 1pm
55	Mahsa Rajabi	Graduate student	Association of MoCA Scores with Advanced Diffusion MRI Metrics	11am- noon

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56	Caeley Reever	Graduate student	Base Editing Rescue of Seizures and SUDEP in SCN8A Developmental Epileptic Encephalopathy	11am- noon
57	Elizabeth Ross	Undergraduate student	The Effects of Abscission Protein Cep55 on Cortical Cell Fate	11am- noon
58	Nooshin Safari	Postdoctoral Scholar	Morphological network alterations in Autism Spectrum Disorder and sex-related differences.	noon- 1pm
59	Vijay Kumar Sagar	Postdoctoral Scholar	Two-photon FLIM and PLIM Imaging to Investigate Metabolism and Oxygen Tension in Live Animals.	11am- noon
60	Brenda Sanchez	Graduate student	Social memory dysfunction coincides with microglia- dependent remodeling of hippocampal CA2 perineuronal nets	noon- 1pm
61	Kayal Sankar	Staff	Astrocyte activation by 7-ketocholesterol is mediated by microglia	11am- noon
62	Rebecca J Scharf	Faculty	Assessing Mother-Child Interaction and Early Childhood Development in Rural Tanzania	noon- 1pm
63	Jonathon Sewell	Graduate student	NGF-regulated extracellular vesicles: A novel mechanism for target-dependent circuit development?	11am- noon
64	Chris Sheehan	Staff	Strategies for Addressing Eligibility Verification and Participant Fraud in Digital Research	noon- 1pm
65	Eliana Sherman	Staff	Exploring the Role of ApoE4 in Alzheimer's Disease Using an Innovative Neuron-Glial Assembloid Model	11am- noon
66	Sophia Stewart	Undergraduate student	Prematurity, the theta/beta ratio, and ADHD detection: a longitudinal EEG study	noon- 1pm
67	Wenwen Sun	Graduate student	Q-Space Trajectory Imaging: Expanding Microstructural Insights via Efficient Model Fitting	11am- noon
68	Isaiah Swann	Graduate student	Quantifying the contributions of intermediate filaments to sensory neuron development	noon- 1pm
69	Swaroop Thonda	Postdoctoral Scholar	Harnessing spatial imaging mass cytometry to explore Lacritin's potential in restoring Alzheimer's disease homeostasis	11am- noon
70	Christopher Turner	Undergraduate student	Patterns of Cortico-Tectal Input Across Species: An Evolutionary Comparative Analysis	noon- 1pm
71	Shriya Varada	Undergraduate student	Using Atypical Functional Connectivity in Autism Spectrum Disorder Risk Prediction with Multivariate Machine Learning Methods	11am- noon
72	Yashasvisai Veeramasu & Corrina Peachey	Undergraduate students	The Role of MMP-9 in Central Nervous System Pericyte-Endothelial Cell Uncoupling and Subsequent Vessel Leakage in Hyperglycemia	noon– 1pm
73	Addison Webster	Postdoctoral Scholar	Unraveling the Neural Circuitry of Energy Balance with Molecular Connectomics	noon- 1pm
74	Reuben Weitzman	Undergraduate student	Possible regulation of neuronal excitability in Temporal Lobe Epilepsy(TLE) by Perineuronal Nets (PNNs) acting as Ca2+ buffers	11am- noon

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75	Elizabeth Wenzel	Postdoctoral Scholar	Clinical Phenotypes of Epigenetic Biomarker Positive versus Biomarker Negative PPD	noon- 1pm
76	Rachel Woods	Undergraduate student	The Impact of Preterm Birth on Early Vocalizations and Motor Reflex Development in Mice	noon- 1pm
77	Jeffrey Wooters	Undergraduate student	Hippocampal PNN loss is associated with delirium- like cognitive impairment in old mice after anesthesia, surgery, and a simulated ICU environment (ASI)	11am- noon
78	Kang Yan	Graduate student	Low-Rank Tensor Dictionary Learning for Denoising High b-Value Diffusion MRI	noon- 1pm
79	Shuqi Ye	Staff	Heart Rate Modulation by the Insular Cortex: Evidence from Direct Cortical Stimulation	11am- noon
80	Ellery Yu	Staff	BEG-GAE: A Novel GNN Framework Integrating Neuroimaging and Behavioral Information to Understand Adolescent Psychiatric Disorders	noon- 1pm
81	Shuo Yuan	Postdoctoral Scholar	Tau Oligomerization-Driven Nuclear Membrane Disruption Pathology in Alzheimer's Disease: Rupture, Invagination, and Lamina Damage	noon- 1pm
82	Ifrah Zawar	Faculty	Predictors of Late-Onset Epilepsy in Persons with Dementia	noon- 1pm
83	Sarah Zeffouni	Undergraduate student	Neurodevelopmental Biomarkers and Lived Experiences: Understanding Late Autism Diagnosis Across Gender and Sex	noon- 1pm
84	Xiaohan Zhang	Staff	EEG Alpha Oscillatory Dynamics Reflect Affective Modulation of Pain by Personally Meaningful Music	11am- noon
85	Xiaohan Zhang	Staff	Neurophysiological Markers of Pain Relief After Focused Ultrasound Mesencephalotomy for Head and Neck Cancer	noon- 1pm