

SCHEDULE BY TIME AND PROGRAM

Live Q&A Time slot	Primary presenter Last name	Program Name	Presentation Title
9-10	Choi	Interdisciplinary Water REU	Influence of Acanthamoeba castellanii on the copper inactivation of environmental strains of Legionella pneumophila in simulated premise plumbing
9-10	Hight	Interdisciplinary Water REU	Developing Test Methods and Water Quality Criteria for Mitigation of Cuprosolvency in Drinking Water
9-10	Hindi	Interdisciplinary Water REU	Comparison and Quantification of High Molecular Weight DNA Through Various DNA Extraction Kits
9-10	Kamineni	Interdisciplinary Water REU	Computational Analysis of Brome Mosaic Virus Replication Protein 1a to Determine Potential Docking Sites, Mutations, and Membrane Association Region Structure
9-10	McMillan	Interdisciplinary Water REU	An investigation of the chemoreceptor modification system in Sinorhizobium meliloti chemotaxis
9-10	Mullet	Interdisciplinary Water REU	mobileOGs-pl v. kyanite MGE Pipeline: tool for classifying bacterial mobile genetic elements
9-10	Salko	Interdisciplinary Water REU	Evaluating Zinc Orthophosphate, Ås Ability to Control Lead Solder Corrosion in Corrosive Drinking Waters
9-10	Smith	Interdisciplinary Water REU	Copper Pipe Corrosion
9-10	Stephens	Interdisciplinary Water REU	Examining the potential for chlorine to inhibit galvanic corrosion of lead solder in drinking water
9-10	Marciano	Jacklyn W. and William R. Jones, Jr. Experiential Learning Scholarship	Shoeing in the Heartland
9-10	Botha	TOUR	How to Increase Engagement for Online Programs: Exercise Intervention Dissemination Tactics in Cooperative Extension
9-10	Bowman	TOUR	Feasibility of using Inertial Measurement Units to study fall risk during daily living: A pilot study on the effects of obesity
9-10	Dopp	TOUR	Examining self-regulation as a target to improve health outcomes for pregnant women with obesity and their offspring
9-10	Eversole	TOUR	Irreversible Electroporation and its Effect on Interferon Gamma and Programmed Death-Ligand 1 Expression in Human Pancreatic Cancer Cells
9-10	Guyton	TOUR	Racial Equity Audit to Develop Recommendations to Increase Accessibility of SNAP-Ed to People of Color
9-10	Kashin	TOUR	Conducting an Accountability Evaluation for the Scaling Up Nutrition Movement's Global Business Network to Support the 2021 United Nations Food Systems Summit Agenda
9-10	Logan	TOUR	Circadian Rhythm's Potential Role in Energy Pathways of Cancer Cells
9-10	Mayo	TOUR	Micronutrient Intake and Physiological Outcomes in Masters and Collegiate
9-10	Melvin	TOUR	Neuronal Nhlh2 Expression in Muscle May Contribute to Energy Expenditure Pathways
9-10	Oster	TOUR	Ultra Processed Foods and Eating Behavior Reinforcement
10-11	Alonso	MAOP	Comparison of Effectiveness of Pathasure ELISA testing kit and PCR testing for the Diagnostics of Calf Diarrhea
10-11	Browne	MAOP	Water infrastructure needs vs current funding proposals -- assessing the gaps
10-11	Caceres	MAOP	Development and validation of portable samplers to measure atmospheric gases
10-11	Deane	MAOP	A dendroclimatic comparison of sugar maple and pignut hickory
10-11	Dinges	MAOP	Synthesis of Hyperbranched Polymers via Metal-Free Self-Condensing Ring-Opening Metathesis Polymerization
10-11	DuMez	MAOP	Transgenesis and Regeneration in Cannabis
10-11	Dunn	MAOP	Impact of COVID-19 on High School Student GPA; Exploration of Factors that Predict Academic Performance
10-11	Fekru	MAOP	Decolonization without independence: framing EU and AU relations through the context of colonialism
10-11	Gallejos	MAOP	Determining pterin methylase function in Methanogens
10-11	Gathright	MAOP	Creating an RNA standard curve for SARS-CoV-2 qPCR
10-11	Jaffe	MAOP	Functional role of Tfam in mitochondria in skeletal muscle
10-11	Johnson	MAOP	Population Dynamics of Designated Atlantic Sturgeon Population Segments
10-11	Johnson-Schuster	MAOP	Analysis of the glycolytic pathways in genetically selected fast-growing broilers
10-11	Mahreen	MAOP	Assessing the genetic determinants responsible for in vivo phenotypic differences between Mayaro strains TRVL 4675 and TRVL 15537
10-11	Nahas	MAOP	Optimizing CO Oxidation Over Copper Single Atom Catalysts Supported by the Metal-Organic Framework, UiO-66
10-11	Odufuwa	MAOP	Black Resistance In The Contemporary Era and Approaches to Ending State Violence
10-11	Richardson	MAOP	Frost Ring Impact in Two Species of Pine
10-11	Shepard	MAOP	Identification of a Key Residue in the NADPH Binding site in a Flavin-Dependent Monooxygenase from Zonocerus variegatus (ZvFMO)
10-11	Sirmons	MAOP	Production and properties of pure bacterial cellulose and surface-acetylated bacterial cellulose
10-11	Smith	MAOP	Daily Activities and Cognition in U.S. Older Adults
10-11	Sobrado	MAOP	Expression of circadian clock genes in mouse hepatocytes
10-11	Spruill	MAOP	Molecular mechanism of Phafin2-mediated induction of autophagy
10-11	Stanphill	MAOP	Diagnostics Development for Gaseous Detonation Velocity
10-11	Toms	MAOP	Assessing Ligand Influence on the Dynamics and Structure of Sphingosine Kinase Isoforms Using Molecular Dynamics Simulations
11-12	Angles	NeuroSURF	Measuring post-movement beta rebound in the motor cortex with optically pumped magnetometry
11-12	Brynes	NeuroSURF	Exploration of brain areas activated by visual and auditory imagery through intracranial electrodes
11-12	Bui	NeuroSURF	In silico analyses of a new PIK3 peptide inhibitor
11-12	Byer	NeuroSURF	Distribution of ipsilateral-projecting retinal ganglion cells in mouse retina
11-12	Cantarero	NeuroSURF	SARM1 KO reduces P-Tau expression after mild TBI/ concussion
11-12	Curry	NeuroSURF	Upregulation of MCU Alters the Size and Synaptic Localization Patterns of Mitochondria
11-12	Gill	NeuroSURF	Complement C3 is required for microglia and monocyte phagocytosis of inhibitory perisomatic synapses in Toxoplasma gondii infection
11-12	Han	NeuroSURF	Neural circuits for adolescent aggression induced by early life malnutrition
11-12	Hayday	NeuroSURF	Divergent roles of PI3K catalytic isoforms in melanoma
11-12	Isaac	NeuroSURF	Episodic future thinking to promote self-regulation in prediabetes
11-12	Kanodia	NeuroSURF	Loss of Pericyte-specific Connexin 43 Impacts Early Vessel Morphology
11-12	Kehoe	NeuroSURF	Physiological data collection for resting state and task-based fMRI

11-12	Korot	NeuroSURF	Mild TBI Causes BBB Leakage and Rapidly Induces an Atypical Neuronal Phenotype
11-12	LaRoche	NeuroSURF	The Association Between Demographic Characteristics and Self-Reported Quality of Life Among Individuals in Recovery From Substance Use Disorders
11-12	Morris	NeuroSURF	Behavioral Characterization of Reward and Sensory Prediction Errors
11-12	Zacharias	NeuroSURF	The Role of MCU in Regulating Mitochondrial Size and Synaptic Localization
11-12	Bono	School of Neurosci Fellows	The Brainstem Cholinergic System and Parkinson's Disease
11-12	Byrnes	School of Neurosci Fellows	Exploration of brain areas activated by visual and auditory imagery through intracranial electrodes
11-12	Clinton	School of Neurosci Fellows	Focused Ultrasound Neuromodulation in a Rodent Model of Depression
11-12	Conrad	School of Neurosci Fellows	Central Mechanism of Gastrin Induced Satiety in Broiler Chicks
11-12	Rafiqzad	School of Neurosci Fellows	BBB leakage causes an atypical neuronal phenotype after early mTBI
11-12	Russell	School of Neurosci Fellows	Quantifying Endocannabinoid Levels in the Nucleus Accumbens Shell Using In Vivo Microdialysis
11-12	Story	School of Neurosci Fellows	Effects of Pro-Inflammatory Microglia Activation on Behavior in Female Mice
12-1	Mallen	CDEB	Isolating Steady-States In Simulated Gene Expression Data
12-1	Patel	CDEB	Using Clustering Algorithms to Identify Steady States in Gene Regulatory Networks
12-1	Gonzalez Velázquez	MolVis	Regulation of GJA1-20k translation by IGF2 mRNA binding protein 1 regulates gap junction formation.
12-1	Gude	MolVis	The Effect of Connexin43-based Gap Junctions on Endothelial Cell Branching and Pericyte Formation in Mice Retinas
12-1	Iyer	MolVis	The Impact of Breastmilk-Derived Growth Factors on Infant Cognitive Development and Executive Function
12-1	Malek	MolVis	A Role of Pannexin-1 in Regulating Nitric Oxide in Endothelial Cells
12-1	Siedlarz	MolVis	Relevance of per2 in Tumor Suppression
12-1	Chung	Neutrino Physics REU	Investigating the Radiopurity of Lithium Molybdate for Improved Bolometers at CUPID
12-1	Jerzyk	Neutrino Physics REU	Evaluating fitting models of the missing energy contribution of Ar and Ti nuclear shell orbitals using the E12-14-012 (e, e'p) scattering experiment at Jefferson Lab
12-1	Middleton	Neutrino Physics REU	Building a Moving LED Device for Calibrating the NuLat Detector
12-1	Qutob	Neutrino Physics REU	Heavenly Rays Illuminate Our Darkest Of Matter: Understanding Particle Physics of Dark Matter Through Cosmic Ray Dark Matter Interactions
12-1	Reitz	Neutrino Physics REU	Analyzing systematic trends in cosmic SFR evolution
12-1	Richardson	Neutrino Physics REU	Effect of anode and cathode luminous sensitivity on photomultiplier tube readings for use in the CHANDLER neutrino detector
12-1	Ross	Neutrino Physics REU	Designing Data Read Out Electronics for the CHANDLER Neutrino Detector
12-1	Sanford	Neutrino Physics REU	Studies of Proton Structure from Photo-and Electro-Production of Light Vector Mesons
12-1	Schroeder	Neutrino Physics REU	Simulating the hard exclusive production of heavy mesons to access proton GPDs
12-1	von Raesfeld	Neutrino Physics REU	The use of Coherent-Elastic Neutrino-Nucleus Scattering to monitor Spent Nuclear Fuel
12-1	Hedrick	Next Generation Scholars	Dendroecological reconstructions of disturbance events in Table Mountain pine
12-1	Chapman	RET in Engineering and Computer Science	Time Series Analysis of Water Quality Parameters
12-1	Hallworth	RET in Engineering and Computer Science	Data Quality Assurance Plan for a Real-Time Water and Weather Monitoring System
12-1	DeWalch	Space@VT	Space Domain Awareness at Virginia Tech
1-2	McMillian	Beckman Scholars	Synthesis and Characterization of Dextran-b-PLA as Compatibilizing Agents in PLA/Starch Blends
1-2	Beyer	Fralin SURF	Elucidating Molecular Interactions of the Endosomal Adaptor Protein TOM1 using Microscale Thermophoresis: Josephine Beyer, Tiffany Roach, Daniel Capelluto
1-2	Busidan	Fralin SURF	Directed evolution of the Amino Acid Permease gens from Arabidopsis as a mean to understand the molecular basis of their amino acid transport specificity
1-2	Chase	Fralin SURF	Auditory Sleep Interventions for Improving Motor Learning in Parkinson's Disease: Phase I
1-2	Clay	Fralin SURF	Reactivation of Herpes Simplex Virus from Neurotrophic Factor Deprivation in Neurons
1-2	deToll	Fralin SURF	Similar carbon uptake rates among wetlands with different development histories
1-2	Gabby	Fralin SURF	High-throughput drug screen to identify new therapeutics to eradicate Borrelia burgdorferi, the causative agent of Lyme disease
1-2	Henry	Fralin SURF	Wings n Things: A study of cicada flight and snake landings
1-2	Hicklin	Fralin SURF	In Silico Exploration of Inhibitors of the Type IV Pilus Extension Protein PilB in Clostridioides difficile
1-2	Hynes	Fralin SURF	The impacts of early life nutritional stress on the immune physiology of house finches.
1-2	Jaghori	Fralin SURF	Analysis of an Amphipathic Helix in a Viral Replication Protein for Targeting Proteins to Endoplasmic Reticulum Membranes
1-2	Kelly	Fralin SURF	Investigation of interactions between flagellotrophic bacteriophages and their hosts
1-2	Makarov	Fralin SURF	Labeling Transcription Sites to Measure Transcription Dynamics
1-2	Markov Madanick	Fralin SURF	Effects of Seasonality on the Eastern Oyster Microbiome Taxonomy
1-2	Owens	Fralin SURF	Characterization and engineering of bacteriophages in microbial communities
1-2	Pollock	Fralin SURF	Evolutionary Precursors to Sulfate Reduction Enzymes in Methanogens: Constructs for Complex Isolation
1-2	San	Fralin SURF	Sensitive and visual detection of HIV-1 DNA using CRISPR-assisted lateral flow assay
1-2	Weitzenhofer	Fralin SURF	Beary Active Cubs? Quantifying American Black Bear Mother and Cub Behavioral Changes Surrounding Hibernation Emergence
1-2	Whittle-Hage	Fralin SURF	Blood Brain Barrier Disruption in a Mouse Model of Chronic Stress
1-2	Wozniak	Fralin SURF	Identification and characterization of the Fusobacterium nucleatum outer membrane bound proteins that drive host-microbe interactions
1-2	Yaun	Fralin SURF	Determining the timing of spore production of Pseudogymnoascus destructans isolates, a virulent pathogen of bats
1-2	Hartman	GlycoMIP SURF	Investigating the Cell Wall Structure of Lyme Disease Bacteria
1-2	Crum	TPS SURF	Quantifying the antimicrobial properties of urushiol
1-2	Kenah	TPS SURF	Auxin Biosensor for Metabolic Engineering Applications
2-3	Belew	Hollins University	Synthesis and Characterization of Dirhenium Compounds That Contain dppm, dppmMe and dppmCN
2-3	Brown	Hollins University	Let's go fishing : Catching cysteine containing proteins in cytoplasmic pools!
2-3	Driss	Hollins University	To Create Beloved Community: Engagement in Post-COVID Anti-Suspension Work
2-3	Emeric-Martinez	Hollins University	The Pursuit for the Protection of Cultural Property
2-3	King	Hollins University	Anthropogenic Noise Pollution Effects on Systems
2-3	Morgan	Hollins University	K-12 Student Learning Modalities and Mental Health during the COVID-19 Pandemic in Virginia
2-3	Olof	Hollins University	The Influence of Suspect Familiarity on Cross Race Effect

2-3	Richardson	Hollins University	Catholic Social Thought and the Free Market
2-3	Sanders	Hollins University	The Socially Dead: an analysis of museums, identity, and the African diaspora
2-3	Alali	KAUST REU	The Application of Amorphous Solid Dispersions in the Delivery of Polypeptide Drugs
2-3	Albaltan	KAUST REU	Optimization and localization method for tension controlled soft robotic actuation in biomimetic bat robot
2-3	Alem	KAUST REU	Lithium extraction from seawater using electrolysis
2-3	Alkhamis	KAUST REU	Ocean-wave Powered Batch Reverse Osmosis System
2-3	Almuallim	KAUST REU	Enhancing High-Speed Imaging of Bat Flight
2-3	Almutawa	KAUST REU	Numerical Investigation of Ambient and Snow Parameters on the Tire Traction Coefficient Using Response Surface Methodology
2-3	Alroogi	KAUST REU	Bacteria biofilms as living Surface-Enhanced Raman Spectroscopy labels for virus (bacteriophage) detection
2-3	Alruhaili	KAUST REU	Photothermal inactivation of bacteria using graphene oxide embedded bacterial nanocellulose membranes
2-3	Alsaman	KAUST REU	Spatiotemporal monitoring of biochemical changes during biofilm maturation via SERS
2-3	Balubaid	KAUST REU	Pedestrian on Wheelchair Safety During Vehicle Crashes
2-3	Mirdad	KAUST REU	Development of an Algorithm for Detection and Tracking of Activated Neutrophils
3-4	Inman	Confluence REEU	Public understanding of the downstream effects of bacterial stream impairments
3-4	Post	Confluence REEU	Stormwater Infrastructure Impacts on Water Quality in Urban Streams
3-4	Trieu	Confluence REEU	Impacts of Human Watershed Alterations on Stream Temperature
3-4	Catalan	Independent	Scoping Anuran Research: Trends of Missing Traits in Anuran Physiological Research
3-4	Davidson	Independent	Molecular Dynamics Investigation of a G-Quadruplex in the KRAS Promoter Region
3-4	Farrokhpoor	Independent	Molecular Dynamics Analysis of VEGF promoter G-Quadruplex Using Polarizable Simulations
3-4	Fogarty	Independent	Polarizable Molecular Dynamics Simulations of the G-Quadruplex Present in the mutant-VEGF Promoter Region
3-4	Grubbs	Independent	Short-term variations in nitrate can trigger lead solder corrosion problems
3-4	Jayakumar	Independent	How Child Functioning Influences Parent Mental Health: Predictions from Spring 2020 Stay-at-Home Orders to Fall 2020
3-4	Mendrinós	Independent	Adverse birth outcomes and proximity to poultry animal feeding operations on the Eastern Shore, Virginia
3-4	Miyazaki	Independent	Partial Agonism of Peroxisome proliferator-activated receptor (PPAR) and Type II Diabetes: Redocking Natural Ligands from 2VSR Receptor
3-4	Murphy	Independent	Spatial Variability of Microbial Metabolism in Mining-Impacted and Reference Streams
3-4	Testa	Independent	Polarizable Molecular Dynamics Simulations of a G-Quadruplex in the promoter region of the human KRAS gene
3-4	Tomlinson	Independent	Spawning behavior of Blacknose dace (<i>Rhinichthys atratulus</i>) in Toms Creek in relation to temperature and potential nest association.
3-4	Wang	Independent	Comparisons of host CD4 from multiple animals using multiple sequence alignments
3-4	Wang	Independent	Resistance to Ribosome-Targeting Antibiotics: Docking of Amicetin to the Binding Site of Blastcidin S in <i>Thermus thermophilus</i>
3-4	Fehlman	VT REEL	Plant Sugar Feeding Habits of Mosquitoes in Residential Blacksburg
3-4	Link	VT REEL	The Effect of Insect Herbivory on Yield and Defense Mechanisms in an Oilseed Plant
3-4	Sayani	VT REEL	Nitrogen Dosage Response Study of Various Strawberry Cultivars: Preliminary Findings
3-4	Stallings	VT REEL	The Characterization of a Potential Phosphatase Family in Plants
3-4	Williford	VT REEL	Weeding out the Competition: Competitive Effects on Container-Grown Nursery Plants