

2025-26 URC Award Recipients

Arts: Visual and Performing

Alonso Llosa, MFA

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, FILM AND MEDIA

Lagarto, a narrative short film

Lagarto is a narrative short film that follows a woman's search for her deceased father's body in an abandoned mining camp in the middle of the Peruvian Amazon rainforest. The film explores the theme of abandonment from dual perspectives: the personal abandonment experienced by a child from a parent, and the environmental abandonment inflicted by those entrusted with its care. The film will be shot entirely in the outskirts of the city of Puerto Maldonado in Peru and the majority of the crew will be Peruvian. The completed project will serve both as a standalone short film and as a proof of concept for *Discoman: The Voice of the Jungle*, a narrative feature film with a runtime of 90 minutes. Presenting the film at international film festivals will serve as significant accolades for both myself and Emory University's Film and Media department. More importantly, however, will be the opportunity to expose audiences to the increasingly deteriorating conditions of the Amazon rainforest.

Malinda Lowery, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, HISTORY

Black, Native, and Southern Foodways

Black, Native, and Southern Foodways is a documentary film project focusing on Black and Indigenous foodways in the U.S. southeast. My proposal to the URC funds the second phase of the project, which includes post-production and additional travel for a 30-minute documentary film suitable for screenings in cultural centers, schools, and community institutions, as well as film festivals. Through historical and ethnobotanical research with Black and Native North Carolinians, this film seeks to answer an urgent question for the health and welfare of these communities and the land they steward: what will it take to re-Indigenize southern food and the food system? The film demonstrates how Black and Native people in the American southeast are reconnecting to one another after centuries of forced separation; how farmers, chefs, and herbalists are reclaiming their food traditions and restoring ecosystems with heirloom ingredients; how they are taking charge of the southern food story; and how they are advocating to change a food system which has brought disastrous health outcomes to people and their environments. Using ingredients created in the Americas and those that migrated here from around the world, the film shows these traditionally marginalized communities taking center stage to navigate identity, memory, and belonging in a Southern landscape shaped by colonization and displacement.

James Pellerito, MFA

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, FILM AND MEDIA

Outside Hitter

Outside Hitter is a feature documentary project about unsung, queer, African-American, 1984 Olympic volleyball star, Flo Hyman. My objective with this request for funding is to create a 10 to 20 minute fundraising trailer for the project, allowing me to apply for additional funding beyond Emory. A three-time college All-American at the University of Houston, Hyman was the first woman to receive an athletic scholarship. She later played professional volleyball in Japan, where she became a huge sports star and fashion model. Hyman advocated for the Civil Rights Restoration Act and Title IX, which prohibits discrimination based on sex in collegiate athletics. The National Girls and Women in Sports Day (NGWSD) which celebrates all women athletes, was originated in her honor in 1987. Hyman, 6'5", died of an apparent heart attack, in the most dramatic and unforgiving way possible, on the court during a volleyball match in 1986. The autopsy later revealed that she suffered from Marfan Syndrome, which caused a fatal aortic dissection. Her impact on all of sport, not just volleyball, remains immeasurable, and her death brought critical media attention to Marfan Syndrome, even saving the lives of some of her family members.

Mariya Vlasova, MFA

ASSISTANT PROFESSOR, OXFORD COLLEGE, HUMANITIES DIVISION,

Frozen Time Mountain

My project is an experimental film exploring tourist desire with a specific focus on the disappearing glaciers of Montana's Glacier National Park (GNP). I am particularly interested in our collective anxiety about losing the natural world and the documentation of this anxiety in the act of the tourist taking pictures. I will work with found images and films ranging from tourist snapshots and View-Master reels to historical and scientific photographs documenting and studying glaciers. Interwoven within my film, these images will create an eclectic homage to lost and quickly disappearing landscapes, a visual artifact of a collective desire to stop time, and a reckoning with human-induced climate change.

Biological and Health Sciences

Francisco Alvarez, PhD

PROFESSOR, SCHOOL OF MEDICINE, CELL BIOLOGY

GABA synaptic function promotes motor axon regeneration

Motor nerve regeneration after axotomy is very slow affecting recovery in the 200,000+ patients that undergo nerve reconstructive surgeries in the US every year. Improved knowledge on mechanisms to enhance motor axon growth is critical. After injury, motoneurons change gene expression towards protein synthesis for axon growth and recent studies highlighted the role of activity accelerating this process. However, this is paradoxical because until recently, most

authors thought that regenerating motoneurons were kept in an electrophysiological “silent state” to redirect metabolic resources towards protein synthesis and transport. This was supported by the shedding of most excitatory synapses from the cell body, while partially keeping inhibitory synapses creating an E/I imbalance that was assumed to dampen motoneuron firing. However, this raises two fundamental questions, 1) how does motoneuron activity promote regeneration? 2) what synaptic drives provide the necessary excitation? Two recent papers from our lab support the hypothesis that the “inhibitory” synapses retained on the cell body promote regeneration. First, we and others found that the potassium chloride co-transporter isoform 2 (KCC2) is removed after axotomy suggesting that “inhibitory” synapses change from hyperpolarizing to depolarizing on regenerating motoneurons. Second, in a recent manuscript we demonstrated that GABA synaptic release on axotomized motoneurons promotes regeneration. The purpose of this URC is to generate new data for an NIH grant application to study the mechanisms by which GABA enhances regeneration. We propose to genetically manipulate KCC2 regulation after axotomy to test its influence on motor axon regeneration, motoneuron function and gene expression

Erin Buckley, PhD

ASSOCIATE PROFESSOR, SCHOOL OF MEDICINE, BIOMEDICAL

Validation of broadband absorption spectroscopy measures of brain water content

Cerebral edema refers to an increase in brain water content that leads to an expansion in brain volume. Edema is a common complication following numerous pathologies, including traumatic brain injury and stroke, that is a significant contributor to morbidity and mortality. As edema progresses, it can distort vital brain structures, alter function, and increase intracranial pressure, resulting in secondary brain damage beyond that of the initial injury. Unfortunately, current clinical evaluation of cerebral edema relies on indirect and intermittent assessment via qualitative imaging or invasive pressure sensors. There is an urgent need for a non-invasive bedside monitor of brain water content to improve the diagnosis of edema and to assess the efficacy of treatments aimed at reducing edema. Broadband absorption spectroscopy (BAS) is a non-invasive optical tool that may provide such a monitor. We have taken the first steps to use BAS to measure regional cerebral water content in adults, showing that BAS is feasible in the intensive care unit and highly repeatable. In a small validation study (3 healthy and 2 stroke), we demonstrated strong correlation between BAS-measured water content and quantitative MRI-measured water. This proposal will increase our sample sizes to demonstrate that these exciting results are generalizable to a variety of edema etiologies. Successful completion of these aims will provide the foundation first steps towards a bedside tool that could have a powerful impact to address a major deficit in the clinical management of critically-ill patients suffering from cerebral edema.

Debayan Dey, PhD

ASSISTANT PROFESSOR, SCHOOL OF MEDICINE, BIOCHEMISTRY

EffluxStop- A Novel Framework for Targeting Efflux Pumps in Pseudomonas aeruginosa

This study addresses the critical challenge of antibiotic resistance in *Pseudomonas aeruginosa*, focusing on the targeting the MexXY-OprM efflux pump. The functional redundancy of multiple efflux pump paralogs, coupled with the structural flexibility of MexXY-OprM's large efflux channel, presents unique challenges for inhibitor design, as efflux pump inhibitors (EPIs) can be expelled by other paralogous pumps within the pathogen and lack a traditional fixed substrate-binding pocket. To overcome these barriers, we propose EffluxStop, an integrated experimental and computational strategy to identify and optimize inhibitors for specific efflux pumps. This framework is broadly adaptable but focuses here on MexXY-OprM, a key player in aminoglycoside resistance. EffluxStop employs a short three-phase approach, completing within the grant proposal timeline, transitioning from hit identification to lead development, aiming to restore aminoglycoside efficacy. Lead compounds will be evaluated for their synergy with aminoglycosides through computational pipelines and microbiological assays, including FIC/MIC synergy tests. A multidisciplinary approach integrates computational modeling, MD simulations with experimental assays, using isoquinoline-based compounds to assess MexXY-OprM inhibition in engineered and clinically relevant *P. aeruginosa* strains. Anticipated outcomes include identifying lead compounds with efflux inhibitory properties, paving the way for long term planned SAR studies which will lead to targeted therapies against resistant *P. aeruginosa* infections. Long-term, the EffluxStop framework can be extended to other efflux pumps, addressing broader clinical challenges of antibiotic resistance and delivering impactful solutions in diverse settings.

Yue Feng, MD, PhD

PROFESSOR, SCHOOL OF MEDICINE, PHARMACOLOGY AND CHEMICAL BIOLOGY

Elucidating human-specific function of MIR137HG and its roles in schizophrenia risk

MicroRNAs (miRNAs) and long noncoding RNAs (lncRNAs) are two classes of noncoding RNAs (ncRNAs) that regulate broad gene networks through distinct mechanisms, essential for normal brain development and function. Genetic alterations and dysregulation of ncRNA genes are found in various neuropsychiatric disorders, represented by schizophrenia (SCZ) that affects 21 million people worldwide. MIR137HG, the host gene of miR-137, is a leading risk gene of SCZ that harbors various disease-associated genetic variants, including a human-specific variable number of tandem repeat (VNTR). How MIR137HG is dysregulated in SCZ brains remains unknown. The highly conserved miR-137 derived from MIR137HG is extensively studied, which is essential for neuronal development and brain function. However, MIR137HG also produces human-specific lncRNAs and miR-2682 that are markedly increased during brain development, which should also be affected by SCZ-associated genetic alterations and contribute to SCZ risk yet have never been investigated. The biased ignorance of these human-specific MIR137HG ncRNAs has left a prevailing knowledge gap regarding MIR137HG function in normal brains and the risk of SCZ. This URC application represents our first step efforts in understanding human-specific function and cooperation of MIR137HG ncRNAs. We propose to elucidate: 1) how the SCZ risk-associated human-specific VNTR affects biogenesis of MIR137HG miRNAs and lncRNAs; 2) how MIR137HG miRNAs and lncRNAs cooperatively regulate human neuronal gene networks that are affected in SCZ brains. Successful completion of these well-focused studies will provide novel clues regarding human-specific mechanisms of MIR137HG in SCZ risk and generate key preliminary data for our planned NIH grant submission.

Ezequiel Gleichgerrcht, MD, PhD

ASSISTANT PROFESSOR, SCHOOL OF MEDICINE, NEUROLOGY

Revealing the Neuroanatomy of Episodic Simulation through Temporal Lobe Epilepsy

Episodic simulation is the ability to imagine personal future events in vivid detail, such as planning a birthday celebration or envisioning a career milestone. This important cognitive skill allows us to set goals, solve problems, and regulate emotions. However, in people with temporal lobe epilepsy (TLE)—a common form of epilepsy that often does not respond to medications—this ability may be impaired. While surgery can effectively reduce or eliminate seizures for many TLE patients, it also poses a risk to memory and other cognitive functions. Despite its importance, episodic simulation in TLE has rarely been studied, leaving a critical gap in our understanding of its neurobiological basis and surgical outcomes.

This study aims to explore how TLE affects future-thinking abilities and identify the brain regions responsible for episodic simulation. By using advanced neuroimaging techniques and detailed episodic simulation tests, we will compare the performance on these abilities between patients with TLE and healthy individuals. For patients undergoing epilepsy surgery, we will also investigate how surgery-related brain changes impact their capacity to imagine the future.

The findings from this study will advance our understanding of how specific brain regions support future-thinking, offering insights into the complex relationship between the brain, memory, and imagination. Additionally, they will help improve counseling for TLE patients, allowing for more informed decisions about surgery and better management of cognitive challenges.

Chuan Huang, PhD

ASSOCIATE PROFESSOR, SCHOOL OF MEDICINE, RADIOLOGY AND IMAGING SCIENCES

Development of a Novel MR-Compatible Robotic System for PET/MR-Guided Breast Biopsies: Advancing Precision in Cancer Diagnostics

Breast cancer remains a leading cause of morbidity and mortality, emphasizing the critical need for precise diagnostic tools. While MR-guided breast biopsies have improved diagnostic accuracy, current workflows are hampered by procedural inefficiencies and high false-negative rates. This study aims to address these challenges by developing a novel PET/MR-compatible robotic biopsy system designed to enhance precision, efficiency, and minimally invasive sampling of diagnostically significant tumor regions. The proposed system integrates advanced functional imaging, using PET tracers like 18F-FLT and 18F-FES, with high-resolution MR imaging for accurate lesion characterization and biopsy guidance.

The robotic platform introduces innovations such as a compact, MR-compatible design and a nitinol-based steerable biopsy needle, enabling real-time targeting within the MRI bore. By eliminating the need for repeated patient repositioning, the system reduces procedural time and

patient discomfort. Preliminary results demonstrate sub-2 mm targeting accuracy and effective tissue sampling in phantom studies, validating the system's potential for clinical application.

The proposed PET/MR-guided robotic system represents a paradigm shift in imaging-guided breast biopsies. By integrating molecular and anatomical imaging with robotic precision, this approach addresses limitations of traditional methods, particularly in dense breast tissue and low-FDG-avid tumors. The project has transformative implications for personalized cancer diagnostics, offering a pathway to improved diagnostic accuracy, reduced false negatives, and enhanced patient care. These advancements pave the way for future large-scale clinical studies and adoption of this innovative system in routine breast cancer diagnostics.

Jie Jiang, PhD

ASSOCIATE PROFESSOR, SCHOOL OF MEDICINE, MEDICINE, CELL BIOLOGY

Deciphering Cell-Type Specific Proteomic Alterations in ALS

Amyotrophic lateral sclerosis (ALS) is a devastating neurodegenerative disease caused by the loss of upper and lower motor neurons, leading to progressive muscle weakness and paralysis. Currently, there is no cure for ALS. Strong evidence supports that non-neuronal cells including astrocytes play an important role in the disease. However, the underlying molecular mechanisms for cell autonomous and non-cell autonomous toxicity in ALS are not well established. Previous efforts to address this question either rely on physical enrichment of target cells with potential contamination from neighboring environment, or focus on transcriptomic changes, which only modestly correlate with protein-level changes. In addition, mechanisms proposed by studying cell cocultures do not capture age-dependent disease course in vivo. We have recently generated a mouse line for cell type-specific expression of biotin ligase TurboID which allows for in vivo biotinylation of proteins. In this study, we propose to determine proteomic changes within spinal cord motor neurons and astrocytes during the course of disease in an ALS mouse model using this newly established TurboID mice. Completion of this study will shed light on developing novel therapies for this fatal disease.

Jessica Konen, PhD

INSTRUCTOR, SCHOOL OF MEDICINE, HEMATOLOGY AND MEDICAL ONCOLOGY

The role of autotaxin and lysophosphatidic acid in suppressing stem-like T cell functions in lung cancer

Immune checkpoint inhibitors (ICI), which work to promote anti-tumor immune activity, have vastly improved the outlook for lung cancer over the last decade, with response rates reaching ~35% in the KRAS/p53 (KP) mutant subset of patients. However, most patients demonstrate primary or acquired resistance to treatment, limiting its efficacy. Therefore, identifying targetable mechanisms of resistance is a critical need. We previously discovered that autotaxin (ATX) is upregulated in lung cancer models with ICI resistance, and co-targeting ATX with ICI can significantly repress tumor growth. The work proposed herein aims to build on these data by analyzing the impact of ATX on the CD8+ T cell subsets that are vital for ICI response. We hypothesize that increased ATX activity promotes ICI resistance by negatively regulating the proliferation and differentiation of CD8+ stem-like T cells in the tumor microenvironment. This proposal will address this with two Specific Aims. First, we will examine the effects of

combination therapy on TCF1+ stem-like CD8+ T cell subsets via flow cytometry and multiplex-IHC, as well as examine the LPAR5-dependent effects on TCF1 expression (Aim 1). Next, we will evaluate tumor progression and ICI response as a function of ATX in a clinically relevant genetically engineered mouse model (GEMM) (Aim 2). We generated a novel GEMM with conditional ATX depletion in the KP background to further characterize ATX effects on immune microenvironment in an autochthonous model. Together, these studies will provide a thorough examination of ATX-dependent effects on the immune landscape and ICI response in lung cancer.

Bo Liang, PhD

ASSOCIATE PROFESSOR, SCHOOL OF MEDICINE, BIOCHEMISTRY

Structures and Mechanisms of Borna Disease Virus RNA Synthesis

This project aims to elucidate the molecular mechanisms of RNA synthesis in non-segmented negative-sense (NNS) RNA viruses, focusing on the Borna disease virus (BDV) as a model system. BDV is uniquely suited for this study due to its compact genome (8.9 kb), nuclear replication strategy, and ability to establish persistent infections while evading immune clearance. Unlike other NNS viruses, BDV replicates in the nucleus, a feature with implications for mRNA-based gene therapy, as it can sustain gene expression without modifying host genomes. We aim to investigate the BDV RNA-dependent RNA polymerase (RdRP), which consists of the catalytic L protein and the essential cofactor phosphoprotein (P). L performs nucleotide polymerization, cap addition, and cap methylation, while P enhances L's activity on the viral genome. Using an integrative approach that combines biochemistry, enzymology, mutagenesis, virology, crystallography, and cryo-EM, we will define the minimal functional requirements for RdRP activity and examine the evolutionary aspects of NNS RNA viruses. This research addresses fundamental questions about BDV nuclear RNA synthesis and replication dynamics. The anticipated insights will significantly advance our understanding of NNS RNA virus biology and inform the development of antiviral strategies. The novel structural and mechanistic findings will provide a robust framework for therapeutic innovation targeting BDV and related viruses.

Marie-Claude Perreault, PhD

ASSOCIATE PROFESSOR, SCHOOL OF MEDICINE, CELL BIOLOGY

Neural Circuit Mechanisms of Early Motor Dysfunctions in ASD

Autism Spectrum Disorder (ASD) is a group of neurodevelopmental disorders characterized by deficits in communication and social behaviors, often preceded by deficits in early motor behaviors, such as low muscle tone, impaired trunk-limb coordination, and impaired balance. Emerging evidence links early motor deficits to ASD progression, yet the neural mechanisms underlying these impairments remain unexplored. Early motor behaviors are regulated by early-maturing supraspinal (brainstem) and spinal circuits, making these prime candidates for investigation.

This project tests the hypothesis that supraspinal and spinal motor circuits are altered in early ASD, focusing on reticulospinal, vestibulospinal and sensorimotor circuits. Preliminary data from an environmental mouse model of ASD (VPA-exposed) reveal early motor deficits, reduced functional connectivity between reticulospinal neurons and lumbar motoneurons (MNs), and fewer lumbar MNs. To strengthen findings, we will obtain comparable data in a genetic ASD model (16p11.2del).

Using an integrative approach combining behavioral assessments, electrophysiology, calcium imaging and stereology, we will address three aims: (1) longitudinally assess motor abilities in 16p11.2del animals and their correlation with later social behaviors, (2) determine the competency of functional connections between supraspinal neurons, sensory afferents, and MNs, to test if reduced competency correlates with early motor deficits, and (3) assess integrity of lumbar MN populations to determine whether a lower MN number contributes to early motor impairments.

By identifying circuit-level alterations, this study aims to provide insights into the neural basis of early motor dysfunction in ASD, informing diagnostic tools and interventions to improve motor function and developmental outcomes of children with ASD.

Sunil Raikar, MD

Associate Professor, SCHOOL OF MEDICINE, Pediatrics

Next generation CD5-CAR gamma delta T cells for T-cell acute lymphoblastic leukemia

There is an unmet need to develop improved therapies for the treatment of relapsed/refractory (R/R) T-cell acute lymphoblastic leukemia (T-ALL), as long-term survival is less than 30%. Targeted cellular therapies, like chimeric antigen receptor (CAR) T-cell therapy, have shown significant benefit in the R/R setting for B-cell malignancies. However, we have not seen the same success in T-ALL, mainly due to the shared antigen expression among leukemic, healthy, and CAR T cells, resulting in off-tumor toxicity and CAR T-cell fratricide. To address these concerns, we propose to utilize gamma delta (GD) T cells as a cytotoxic alternative to traditional alpha beta (AB) T cells, investigating efficacy of CD5 CAR modification in the two main subtypes of GD T cell: Vdelta1 (Vd1, Aim 1) and Vdelta2 (Vd2, Aim 2). While a subset of Vd1 GD T cells do not express CD5, eliminating risk of CAR T fratricide, Vd2 T cells do express CD5, and will thus require further modification through CRISPR-Cas9 knockout (KO) of CD5. This will not only eliminate CAR T fratricide, but recent literature suggests CD5 KO enhances efficacy of T-cell immunotherapy. Finally, as GD T cells act independently of the major histocompatibility complex (MHC), we can easily utilize this product in an allogeneic, "off-the-shelf" setting, quickening access to R/R T-ALL patients whose aggressive disease is often a limiting factor to the cumbersome traditional cell therapy manufacturing process. Ultimately, we aim to advance the use of CAR GD T cell therapy for the treatment of pediatric R/R T-ALL patients.

Chang Su, PhD

ASSISTANT PROFESSOR, ROLLINS SCHOOL OF PUBLIC HEALTH, BIOSTATISTICS AND BIOINFORMATICS

Novel statistical methods for uncovering the genetic basis of Alzheimer's disease

Alzheimer's disease (AD) affects over 6 million individuals in the U.S., with cases expected to double by 2060. Although genome-wide association studies (GWAS) have identified numerous AD-associated genetic variants, the functional mechanisms underlying these variants remain elusive, limiting therapeutic advances. Transcriptome-wide association studies (TWAS) have emerged as a powerful statistical approach to identify genes associated with AD risk through genetic regulation, providing deeper insights into functional mechanisms. However, most existing statistical methods on TWAS rely on bulk gene expression data, which aggregate gene expression across brain cell types. As a result, these methods fail to capture the cell-type-specific (CTS) genetic regulation critical to AD mechanisms.

Recent advances in single-cell RNA-sequencing (scRNA-seq) provide an unprecedented opportunity to study CTS AD genes, especially in microglia and other low-abundance cell types vulnerable in AD. Nevertheless, the unique challenges of scRNA-seq data—such as high noises and technical variations—render existing statistical methods inadequate.

This proposal aims to develop innovative statistical methods for CTS TWAS, focusing on two goals: (1) developing a novel multi-task learning framework to model shared and specific genetic regulation across brain cell types using scRNA-seq data, and (2) integrating bulk and scRNA-seq data via transfer learning to maximize statistical power and discovery of CTS AD genes. These methods will be applied to population-scale datasets, leveraging complementary information from bulk and scRNA-seq data. By addressing key limitations in current TWAS approaches, this work will uncover CTS mechanisms of AD pathogenesis and inform new therapeutic targets for AD.

Humanities

Erica Kaneshaka, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, ENGLISH

Tender Objects: Cute Culture and Infantile Fantasies of Asian America

This book project positions the contemporary fetishization of Japanese kawaii (“cute”) culture in longer histories of American racism and the alignment of Asian Americans with cute objects. Drawing on archival research in late nineteenth and early twentieth century children's literature and material culture, the project illustrates how seemingly innocent objects such as picture books, dolls, and teddy bears have underpinned notions of Asian cuteness, associating Asian people with toys and children in the American imagination in ways that have disguised racial, sexual, and imperial violence as forms of love and care. In tracing the transpacific circulation of children's books and toys between Japan and the United States from the late nineteenth century to the present day, this project exposes the importance of childhood's lost objects—items that were quite literally “loved to pieces” before being discarded—to how we understand Japanophilia and its longstanding relationship with the gendered racialization of Asian Americans.

While most of the research on kawaii has focused on the context of postwar Japan, this book will be the first to place kawaii in a larger historical and transnational frame and to focus

explicitly on how kawaii's globalization has shaped Asian American culture and politics. A URC grant will support the completion of this book project through a course release and travel funding.

Yun Kim, PhD

SENIOR LECTURER, EMORY COLLEGE OF ARTS AND SCIENCES, LINGUISTICS

Decoding Morphology Through Sound: A Cross-Linguistic Study of Acoustic and Articulatory Cues in Language Learning

This project examines how acoustic and articulatory cues aid in acquiring morphological information in language, with a focus on English and Korean. While morphological understanding—essential for interpreting word meaning and sentence grammar—has been thoroughly studied in written contexts, the role of phonetic cues in spoken language needs more exploration.

Building on existing research, this study has two main goals: (1) to expand English experiments comparing morphologically simple and complex forms, and (2) to extend these findings through analysis of Korean, a morphologically rich language. Our initial results show that native English speakers utilize acoustic cues like vowel and consonant durations to distinguish morphological structures. In Korean, our preliminary data reveals more subtle phonetic distinctions, leading us to investigate articulatory gestures for further insights.

Through the Gorilla online platform, we will study diverse learner populations, addressing gaps in second language acquisition research. By identifying both universal and language-specific strategies, this research will enhance linguistic theory, improve second language teaching methods, and strengthen AI speech processing systems. The funding will also support undergraduate research involvement, enriching both our research outcomes and educational goals. This project will lay groundwork for future collaborative grants and broader applications in language learning and technology, supporting the URC's mission to advance knowledge and benefit society.

Jinyu Liu, PhD

PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, HISTORY

Outsiders in Town: Mobility, Exclusion, and Negotiation in the Roman West (First – Third Centuries CE)

The proposed book project investigates the less favorable aspects of the experiences of (im)migrants in the early Roman Empire, challenging the overly optimistic views prevalent in contemporary scholarship concerning the interaction between (im)migrants and the local populace in the Roman world. In particular, I focus on six areas of inquiry: 1. the (im)migrants' limited access to local benefits; 2. ethnic profiling; 3. various forms of exclusion in the occupational sphere; 4. marriage options; 5. spatial experiences of the (im)migrants; 6. (im)migrants and their religious practices. This project serves as a necessary corrective to the existing disproportionate emphasis on integration and connectivity within the ancient world. By centering on individual identities and the challenges encountered by individuals who moved around or permanently relocated within the Roman Empire, my research highlights the tangible

and intangible costs associated with navigating rights, obligations, and necessities in their new environments. It is certainly not my intention to negate the importance of integration or to dismiss migration as a catalyst for change, nor to discount the agency of (im)migrants. However, it is essential to emphasize that the process of integration was neither straightforward nor universally positive. Structural barriers and exclusionary phenomena complicated integration efforts, resulting in inclusion through exclusion in certain instances. Ultimately, by examining the structural barriers that elevated negotiation costs for immigrants from diverse backgrounds in the Roman Empire, my research contributes to a broader dialogue regarding whether empires generally manage ethnic diversity more effectively than nation-states, presenting counterarguments to this notion.

Gwendolynne Reid, PhD

ASSOCIATE PROFESSOR, OXFORD COLLEGE, HUMANITIES

Routledge Handbook of Humanities and Social Science Communication

Current trends in higher education underscore the crisis in the humanities. And yet humanities disciplines are relied on to teach the “soft” skills employers seek, to fuel the creative economy, and to help society make decisions about urgent and complex crises and opportunities. This contradiction underscores the need to better understand these fields and how they do their work. While much research exists on scientific communication, scholars have spent less time studying disciplinary communication in the humanities or how these disciplines communicate their work publicly. Communication, however, is key to doing that work successfully and to garnering much-needed support. This project, the Routledge Handbook of Humanities and Social Science Communication, addresses this gap with an edited collection that will collect foundational and emerging scholarship on writing, communication, and teaching in humanities and humanistic social science disciplines. The Handbook will serve an agenda-setting function, encouraging more work in this area, and will be written accessibly, with an eye towards stimulating dialogue among scholars, students, and stakeholders with diverse backgrounds, creating a foundation for future scholarship and study. As the lead editor on the project, I am seeking URC support for course releases that will allow me to successfully complete this major undertaking. I currently teach a 2-2 load while also directing Oxford College’s Writing & Communication Program, a role that includes a range of service. While I have the expertise for this project, my teaching and service would make it difficult to successfully complete the project without release time.

Susan Reynolds, PhD

ASSISTANT PROFESSOR, CANDLER SCHOOL OF THEOLOGY, CATHOLIC STUDIES

Ways of the Cross: Passion, Performance, and Divine Solidarity

The Stations of the Cross is a traditional Roman Catholic penitential practice. On Good Friday, Christians remember the suffering and death of Jesus Christ by ritually reenacting fourteen moments in the story of the crucifixion. For communities on the edges of the church and society, rehearsing Jesus’s execution is more than an act of piety. It is also an unexpected site of divine solidarity, theological agency, and political resistance. The proposed project, *Ways of the Cross: Passion, Performance, and Divine Solidarity*, explores what it means to perform the passion in the face of war, violence, epidemic, and displacement. With vivid prose and journalistic attention

to detail, this book project takes us from migrant camps in Northern Mexico to gentrifying Atlanta neighborhoods, from a Bavarian village to Bay Area communities scarred by the AIDS epidemic. Interweaving theology, ethnography, and social history, *Ways of the Cross* examines how communities use the narrative and aesthetic template of crucifixion to locate their struggles in the heart of the Christian story while recasting earthly power relationships in sensual, spatial, geographical terms. In so doing, it invites us to rethink what we know about tradition, incarnation, and the transgressive intimacy of bodily performance. I seek URC support for course releases that would facilitate the completion of this book manuscript.

Iliana Rodriguez, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, HISTORY

Vans, Trucks, and Ladders: A Migrant History of the US Construction Industry

This project examines five decades of metropolitan development in the nation's Sunbelt region through the laboring lives of Latinx workers. It explores intersecting questions related to class, race, ethnicity, and migration between 1965 through the initial period of the Covid-19 pandemic. Following World War II, cities across the Sunbelt (which runs from the Southeast to the Southwest) witnessed a development boom as private capital and federal funding afforded the establishment of new industries and the construction of highways, urban centers, and suburban communities. The pro-growth, pro-business Sunbelt ethos was also accompanied by an increase in anti-immigrant politics. I investigate these parallel developments through a focus on the Latinx migrants that worked on the region's critical infrastructure as they navigated sprawling landscapes where their mobility was subject to increased levels of policing.

While there exists important work on the Sunbelt's postwar (sub)urban growth, there is little on the laborers who made this possible. I approach to narrating the making (or rather, building) of the region through the lived experiences of Latinx workers. Sitting at the intersection of histories on labor, migration, and postwar political economies, this social history illuminates how Latinx workers have made sense of the built environments that bear evidence of their (invisible) contributions. I hope to illustrate the long historical relationships between migrant labor and regional development that have shaped built environments across the nation.

With the support of a URC award, I will make significant progress on this research project which will become my second monograph.

Sarah Rodriguez, PhD

ASSOCIATE PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, RUSSIAN AND EAST ASIAN LANGUAGES AND CULTURES

Growing Old: A History of Aging in Global China

By 2050, over one-third of China's population will be at least 60 years old and retired. Yet state efforts to meet the needs of the swelling senior population have not kept pace with demand for eldercare. Since the late 1970s, the rollback of the collective-era social safety net, uneven economic development, and limited healthcare have compounded the challenges senior citizens face. My proposed monograph, "Growing Old: A History of Aging in Global China," investigates how these shifts have shaped experiences with aging in three Chinese locales with differing

social welfare policies and levels of economic development: Shanghai, Chengdu, and Shenyang. Drawing on archival research and interviews with 100 urban and rural retirees, this research considers when old age begins and how gender, ethnicity, and class have influenced the timeline of aging since the 1949 Communist revolution. “Growing Old” also explores how different models for addressing eldercare—the traditional multigenerational household, the Soviet socialist approach, and the privatized American model—have historically informed China’s approach to this issue. Additionally, this research connects Mainland and overseas Chinese diaspora experiences with aging. Focusing on nursing homes for Chinese immigrants in New York City, “Growing Old” compares eldercare in the People’s Republic and the US. This project not only provides a historical framework for interpreting China’s contemporary demographic challenges, but it also positions these findings within global trends.

Thomas Rogers, PhD

PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, HISTORY

Celebration and Crisis: How Brazil Entered the Neoliberal Age

I approach the abstraction of neoliberalism through the concrete realities of working-class experience and business history. Large mobilizations in the 1980s to redemocratize Brazil and secure working-class power stood in tension with ballooning debt and unemployment. Like elsewhere in the world, some Brazilians called for freer markets and reduced state involvement in the economy. My project asks what that looked like, seeking to uncover a story behind the headlines and to understand the roots, impacts, and consequences of Brazil’s potent political and economic transitions in the 1980s. In all, what characterized Brazil’s entrance into the era of neoliberalism and how did people—in this case rank-and-file workers and business executives—experience the period? Concretizing these abstract questions in the detailed study of two companies and their employees will allow for a coherent narrative of the everyday impacts of economic and political change, using archival sources to track the fortunes of an auto manufacturer (Gurgel) and a heavy industry conglomerate (Indústrias Villares), and oral histories to understand the experiences of their workers.

Gary Waters, PhD

LECTURER, EMORY COLLEGE OF ARTS AND SCIENCES, FRENCH AND ITALIAN

Orbecche: A Critical Translation with notes

My project proposal is a translation with critical introduction of Giovan Battista Giraldi Cinzio’s tragedy, *Orbecche*. *Orbecche* is one of the most influential tragedies of the Italian Renaissance due to its impact on literary theory and theatrical praxis in the mid-sixteenth century. Currently, there is no published translation of this important tragedy which grapples with social and political issues like female agency and the limits of sovereign power. In the context of our current civic and social climate, tragic literature represents a didactic framework in which we can model our ethico-political responsibilities. Giraldi Cinzio, much like the ancient Greeks, saw tragedy as an intersection of political power and social conscience, and through *Orbecche*, he explored contemporary social issues which offer us a thought-provoking and stimulating way to address some of the most consequential problems facing society today.

I will further situate Giraldi Cinzio's poetic practice in relation to other genre theorists of his day. Particularly, I will highlight the ways in which Giraldi Cinzio uses theoretical innovation with the invented plot, the use of horrific spectacle, and character development as precursors for other theorists and writers throughout Europe such as Cervantes, Lope de Vega, and Shakespeare. Giraldi Cinzio's Orbecche foreshadows the standard of tragic excellence that will appear in both France and England, and it provides one of the clearest throughlines linking these literary traditions.

Interdisciplinary

David Civitello, PhD

ASSOCIATE PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, BIOLOGY

Peter Little, MD

PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, ANTHROPOLOGY

Linking Movement Patterns of Ranging Livestock Herds in Mwanza, Tanzania to Transmission Potential of Human Schistosomes

Schistosomiasis is an infectious disease caused by parasitic, waterborne worms that infect 150 million people. Despite the availability of treatment, communities experience high reinfection rates due to dependence on schistosome-infested waterbodies. Before infecting humans, schistosomes must first infect snails, with snails in nutrient-rich environments releasing more schistosomes, thereby increasing infection risk. In East Africa, a significant source of waterbody nutrient load comes from ranging herds of livestock that excrete nutrient-rich manure into waterbodies, with higher snail infection prevalences and greater per snail schistosome release rates observed in waterbodies visited by livestock. Despite livestock manure acting as a potential nutrient driver, herd movements are poorly understood, as are the socioecological factors governing herd movement, significantly limiting understanding on the spatial and temporal patterns of manure deposition into the landscape. We propose an interdisciplinary mixed-method approach to investigate landscape-level impacts of livestock manure on schistosomiasis. First, we will characterize herd movement patterns around Mwanza, Tanzania using GPS tracking collars (AIM 1). We will then conduct qualitative interviews to expound upon social norms and regulations governing herd movement (AIM 2). Finally, we will incorporate these data into an agent-based model to simulate landscape-level transmission dynamics while tracking snails, humans, and livestock and test how different livestock management decisions could alter transmission risk (AIM 3). This interdisciplinary project will improve our understanding of the socioecological mechanisms governing schistosomiasis in East Africa, engage Emory faculty in addressing novel questions to expand expertise, and transcend boundaries between social and ecological sciences to pursue societally impactful research.

Nicholas Giordano, PhD

ASSISTANT PROFESSOR, NELL HODGSON WOODRUFF SCHOOL OF NURSING, NURSING

Vinita Singh, MD

ASSOCIATE PROFESSOR, SCHOOL OF MEDICINE, ANESTHESIA

Jinbing Bai, PhD

Assistant Professor, NELL HODGSON WOODRUFF SCHOOL OF NURSING, NURSING

Calli Cook, PhD

Associate Professor, NELL HODGSON WOODRUFF SCHOOL OF NURSING, NURSING

Characterizing Microbiome Profiles Linked to the Development of Chronic Postsurgical Pain

This interdisciplinary study will explore the relationship between gut microbiome composition and the development of chronic postsurgical pain in patients undergoing shoulder surgery. Preoperative microbiome samples will be collected from patients for rRNA sequencing to profile bacterial diversity. Postoperative samples will be taken at 3 months and also sequenced. These microbiome data will be paired with patient-reported pain outcomes, inflammatory markers, and clinical data. The study will investigate whether preoperative microbiome diversity and specific bacterial taxa correlate with CPSP severity and whether changes in microbiome composition post-surgery affect pain outcomes.

Study Goals: The primary goal of this work is to identify microbiome-related biomarkers that may predict the occurrence and severity of CPSP. Specific aims include: 1) Characterizing the gut microbiome and determining its association with postoperative pain outcomes; 2) Investigating the role of longitudinal changes in markers linked to gut-brain axis in modulating pain sensitivity and the transition to CPSP. The study will explore whether distinct microbiome profiles are associated with increased pain and CPSP risk, potentially offering a novel avenue for early identification and intervention.

Impact: This research will provide crucial insights into the role of the microbiome in postoperative pain, offering a foundation for future studies focused on microbiome-based interventions (e.g., prebiotics or probiotics) to prevent or reduce CPSP. The results could lead to personalized pain management strategies and improving patient outcomes. Additionally, this study will generate pilot data to support larger, federally funded research efforts targeting microbiome modulation for pain management from our interdisciplinary team of investigators.

Jennifer Rieser, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, PHYSICS

Amir Pourmorteza, MD

ASSISTANT PROFESSOR, EMORY UNIVERSITY SCHOOL OF MEDICINE, RADIOLOGY AND IMAGING SCIENCES

Dynamics of living and reconfigurable transport networks

Fire ants build intricate nests of tunnels and chambers that support their colonies' survival and success. These structures help regulate temperature, facilitate airflow, and enable efficient movement, all of which contribute to their adaptability as one of the world's most invasive species. Despite their ecological and economic impact, how these ants build and use their nests remains poorly understood. Our project combines advanced 3D imaging with innovative feeding techniques to explore fire ant nests like never before. By feeding ants iodine-enriched food, we make them

visible in CT scans, allowing us to track their movements and interactions within the nest. This method enables us to study both the structure of the nests and the behaviors of the ants that use them. We aim to uncover how ants construct and navigate their nests, and how these structures are adapted or reconfigured over time. This research will reveal the dynamic relationship between the physical nest and its function, shedding light on how fire ants thrive in diverse environments. Beyond advancing our understanding of biological networks, our findings could inform strategies to mitigate the spread of invasive species and inspire innovations in fields like robotics and imaging. This project lays the groundwork for future studies by providing key data and methodologies, ensuring that fire ants' fascinating and complex behaviors are captured in unprecedented detail.

Mathematics and Natural Sciences

Wei Jin, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, COMPUTER SCIENCE

Toward Next-Generation Graph Anomaly Detection: Characterization, Robustness, and Contextual Integration

Anomalies in graph-structured data pose critical challenges to modern industries and public sectors, impacting areas such as finance, cybersecurity, and healthcare. For instance, undetected anomalies contribute to billions in annual losses due to fraud, increased vulnerabilities in national infrastructure, and delayed responses to health crises. The ability to detect these anomalies with precision and reliability is essential for protecting economic stability, ensuring the security of critical infrastructure, and safeguarding public health. This proposal addresses the limitations of current graph anomaly detection (GAD) techniques by introducing an advanced, robust, and contextually rich detection framework to meet the demands of real-world applications. Our proposal aims to provide a comprehensive solution by focusing on three key objectives. First, we develop a systematic characterization of graph anomalies at node, edge, and subgraph levels, which will inform advanced detection tools. Second, we will rigorously assess the robustness of existing detectors and develop detection models resilient to various perturbations through a dual-sharpness optimization strategy. Lastly, by integrating external knowledge such as Large Language Models, we will enable context-aware detection, improving accuracy for context-sensitive anomalies that existing models often overlook.

The proposed framework has transformative potential to enable proactive anomaly detection across critical domains. This research promises to advance GAD capabilities to meet the demands of dynamic, high-stakes environments. The success of this project will help address societal imperatives such as strengthening cybersecurity, reducing financial fraud, and enhancing public health monitoring, through a next-generation GAD system that is both technically rigorous and socially impactful.

Kai Shu, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, COMPUTER SCIENCE

Towards Reliable Authorship Attribution in the Era of LLMs: Assessment and Enhancement

Authorship attribution has long been an important problem and is widely used in various applications pertaining to web security and integrity such as misinformation intervention, fraud tracking, plagiarism detection, forensics, etc. The advent of Large Language Models (LLMs) has brought two major challenges for authorship attribution models: (1) LLMs can be utilized to conceal the identity of texts and then fool Human-Authorship (HA) Attribution Models; and (2) LLMs can generate human-like texts that are hard for Neural-Authorship (NA) Attribution Models to distinguish from human-written texts. Malicious users can possibly utilize LLMs to produce harmful contents online without the risk of being identified. Thus, we study two pressing and critical tasks to assess and enhance the reliability of HA and NA authorship attribution models respectively in the era of LLMs.

Social Sciences

Tucker Balch, PhD

PROFESSOR, GOIZUETA BUSINESS SCHOOL, FINANCE

Financial Market Manipulation by AI: Causes and Mitigation

We will investigate the agency problem in the context of AI-driven algorithmic trading, with a focus on how algorithms may inadvertently learn to engage in market manipulation such as spoofing. In finance, the agency problem arises when a “Principal” delegates tasks to an “Agent” whose interests may diverge. The agent is expected to act in the principal’s best interest—typically that of an investor or institution—however when the agent pursues actions aligned with its own objective, a conflict may arise at the expense of the principal. Unlike human agents, who follow objectives arising from incentives (e.g., bonuses) bounded by ethical guardrails, AI agents operate according to human-provided instructions and self-learning. Harmful strategies may arise even if the agent adheres to explicit human directions.

Our project will be among the first to examine this phenomenon in the context of finance market agency theory. We will simulate a market including a set of trading agents following stereotypical strategies, as well as an AI trader using profit-maximizing strategies. Our goal is to determine the conditions under which the AI develops manipulative tactics without explicit programming. We will explore mitigation strategies, such as reward modifications, to reduce unethical behavior. Through agent-based modeling and simulation, we will also evaluate regulatory scenarios to assess their effectiveness.

We aim to inform ethical and regulatory frameworks to address the challenges posed by AI in financial markets. We request funding to support student researchers to implement the simulation infrastructure, computing resources for running simulations, and travel to engage collaborators.

Tetyana Balyuk, PhD

ASSISTANT PROFESSOR, GOIZUETA BUSINESS SCHOOL, FINANCE

Parental Income Inequality, Child Support, and Children's Consumption

Child support is one of the largest and most regular inter-household transfers, estimated at \$30.6B annually in the U.S. However, these payments are largely unobservable due to the private nature of inter-household transactions, posing data challenges and creating gaps in the literature. Yet, child support is an important policy tool to re-allocate child-rearing expenses between parents. These payments (and non-payments) can affect the well-being of millions of children of divorced and never-married parents, especially when parents have low or substantially unequal incomes. Recent socioeconomic changes necessitate research on whether child support is effective in modern times. The effects of child support on parents' saving/investing and borrowing choices, its effects on children's consumption, and its heterogeneous effects are also understudied. This project will examine the impact of child support on parents' consumption—saving decisions, financial choices, and child-rearing expenses, through robust empirical analyses using new micro data containing a comprehensive panel of consumer transactions and latest empirical methods with the aid of a newly developed theoretical framework. It will provide a set of stylized facts about parental income inequalities and child support payments; demonstrate how financing frictions, limited commitment, and modern custody arrangements affect the relation between child support and consumption—saving choices; measure marginal propensity to consume (MPC) with respect to child support; examine the causal effects of child support shocks; and estimate heterogeneous effects. The project is interdisciplinary in nature and can have impacts that inform policy and reach multiple disciplines, such as Economics, Sociology, Law, and Public Policy.

Leyla Eghbalzad, PhD

ASSISTANT PROFESSOR, OXFORD COLLEGE, PSYCHOLOGY

The Association Between Childhood Adversity and Statistical Learning Ability in Children: A Neuroimaging Study

Childhood adversity is critical factor influencing cognitive development, yet its impact on statistical learning (SL) ability remains underexplored. This study investigates the relationship between socioeconomic status (SES), childhood trauma, and SL—a cognitive process essential for language acquisition and broader cognitive functions. Existing research highlights that children from lower SES backgrounds experience reduced exposure to cognitive and linguistic stimulation, higher levels of environmental stress, and adverse childhood experiences, all of which may impair language and cognitive development. Moreover, SES disparities and early-life exposure to trauma manifest as structural and functional differences in brain regions associated with memory, language, and cognitive control. Building on these findings, this study proposes to examine how SES and childhood trauma interact to affect SL abilities in 30 children ages 6–12 years, a crucial developmental period. Using a combination of behavioral assessments and neuroimaging techniques, we will evaluate SL performance, language proficiency, and brain structure in diverse SES contexts. This research will advance our understanding of the neural mechanisms underlying adversity-related disparities in SL, contributing to developmental neuroscience and informing targeted interventions. By identifying how SES and trauma shape cognitive and neural processes, this study could add to our knowledge of the impact of childhood adversity with the ultimate goal of reducing educational inequities. Additionally, this project will provide undergraduate students at Oxford College with hands-on research opportunities, fostering their academic and professional growth while supporting broader institutional goals at Emory University.

Megan Mucioki, PhD

**ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES,
ENVIRONMENTAL SCIENCES**

Elucidating cultural ecosystem services through relational health and wellbeing benefits with Indigenous Peoples in the United States: foundational planning

This proposal brings together health, environmental sciences, and Indigenous studies to challenge the way cultural ecosystem services (CES) are conceptualized and the way Indigenous health disparities are approached in the United States. In this proposal we lay the groundwork through planning efforts for research that will test the Indigenous Cultural Ecosystem Services theoretical model developed by PI Mucioki. The long-term goal of this project is to understand how environmental stewardship by Indigenous peoples, as one type of CES, garners quantifiable health and wellbeing benefits to Indigenous Peoples in the United States. This proposed research takes a community-based research and Indigenous methodologies approach, centering collaborating Indigenous communities as research partners. To successfully do so, it is imperative to have a phase of community discussion and planning to shape the research we will do together. The URC funds requested will be used to support the community planning phase prior to external grant funded research. The planning phase will allow new relationships to be formed and old ones to be strengthened with two communities, the Eastern Band of Cherokee and The Karuk Tribe, that have active forest co-stewardship agreements on public lands and are proposed collaborators for this work. Planning milestones include: one community discussion and five individual conversations during visits to each Tribal community, a two-day workshop at Emory with project collaborators to co-develop concepts of CES and health and our external research proposal, and the development of an external research proposal submitted to USDA-NIFA-AFRI Applied Science Program, Sustainable Agroecosystems program area.

Megan Reed, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, SOCIOLOGY

America's Chosen Families: Measuring the Prevalence and Implications of Voluntary Kinship in the United States

Voluntary kinship, also known as intentional families, fictive kinship, and chosen families, are the family-like relationships that people form outside of traditional definitions of kinship by marriage, blood, or adoption. The previous literature has mostly ignored voluntary kin and, when they have been studied, researchers have primarily employed qualitative case methods focusing only on specific populations like LGBTQ+, immigrant, and African American communities. The proposed project aims to provide the first nationally representative estimates of the prevalence of voluntary kinship in the United States. I will collect novel data on voluntary kin relationships using a new survey module that I designed for the nationally representative National Couples Health and Time Use Survey (NCHAT). This will allow me to be the first to document the prevalence and implications of voluntary kinship, focusing on how voluntary kinship practices, including the size of voluntary kin networks and support provided, vary across different groups in the United States. I will also study how voluntary kinship is associated with the mental health of LGBTQ+ individuals to test whether voluntary kin can buffer the negative effects of biological family estrangement and LGBTQ+ discrimination.

Holli Semetko, PhD

PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, POLITICAL SCIENCE

A Cross-National Comparative Study of the Drivers and Consequences of Affective Polarization in Mexico and India

The growing problem of affective political polarization in the U.S. is the focus of a substantial body of research but less is known about its prevalence in non-western multiparty contexts. To address this gap, we compare the drivers and consequences of affective political polarization in Mexico and India. We address a number of hypotheses framed as questions here: What are the drivers and consequences of affective polarization? Are more frequent and politically attentive users of social and traditional media more likely to be affective partisans than partisans or others including first-time voters? Are affective partisans stronger party supporters than partisans? Do affectively polarized partisans in winner and loser camps display more or less trust in government leaders? Do they display more extreme emotions? This cross-national comparative study will make important and novel contributions to the concept and measurement of negative partisan affect and the prevalence of affectively polarized partisans in two large understudied countries in the global south. Measuring attention to political news, media use, and more, the study models influences on vote choice among affectively polarized partisans as distinct from partisans for each party controlling for demographics. We also model influences on trust and emotional reactions among affective partisans, partisans, and others in winner and loser groups. Results will be published in academic journals and reported in news articles by the authors in both countries along with policy recommendations. Results will be the basis for external grant proposals to extend this research to a larger number of countries.

URC – Halle Global Research

David Civitello, PhD

ASSOCIATE PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, BIOLOGY

Peter Little, MD

PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, ANTHROPOLOGY

Linking Movement Patterns of Ranging Livestock Herds in Mwanza, Tanzania to Transmission Potential of Human Schistosomes

Schistosomiasis is an infectious disease caused by parasitic, waterborne worms that infect 150 million people. Despite the availability of treatment, communities experience high reinfection rates due to dependence on schistosome-infested waterbodies. Before infecting humans, schistosomes must first infect snails, with snails in nutrient-rich environments releasing more schistosomes, thereby increasing infection risk. In East Africa, a significant source of waterbody nutrient load comes from ranging herds of livestock that excrete nutrient-rich manure into waterbodies, with higher snail infection prevalences and greater per snail schistosome release rates observed in waterbodies visited by livestock. Despite livestock manure acting as a potential nutrient driver, herd movements are poorly understood, as are the socioecological factors governing herd movement, significantly limiting understanding on the spatial and temporal patterns of manure deposition into the landscape. We propose an interdisciplinary mixed-method approach to investigate landscape-level impacts of livestock manure on schistosomiasis. First, we will characterize herd movement patterns around

Mwanza, Tanzania using GPS tracking collars (AIM 1). We will then conduct qualitative interviews to expound upon social norms and regulations governing herd movement (AIM 2). Finally, we will incorporate these data into an agent-based model to simulate landscape-level transmission dynamics while tracking snails, humans, and livestock and test how different livestock management decisions could alter transmission risk (AIM 3). This interdisciplinary project will improve our understanding of the socioecological mechanisms governing schistosomiasis in East Africa, engage Emory faculty in addressing novel questions to expand expertise, and transcend boundaries between social and ecological sciences to pursue societally impactful research.

Erica Kaneshaka, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, ENGLISH

Tender Objects: Cute Culture and Infantile Fantasies of Asian America

This book project positions the contemporary fetishization of Japanese kawaii (“cute”) culture in longer histories of American racism and the alignment of Asian Americans with cute objects. Drawing on archival research in late nineteenth and early twentieth century children’s literature and material culture, the project illustrates how seemingly innocent objects such as picture books, dolls, and teddy bears have underpinned notions of Asian cuteness, associating Asian people with toys and children in the American imagination in ways that have disguised racial, sexual, and imperial violence as forms of love and care. In tracing the transpacific circulation of children’s books and toys between Japan and the United States from the late nineteenth century to the present day, this project exposes the importance of childhood’s lost objects—items that were quite literally “loved to pieces” before being discarded—to how we understand Japanophilia and its longstanding relationship with the gendered racialization of Asian Americans.

While most of the research on kawaii has focused on the context of postwar Japan, this book will be the first to place kawaii in a larger historical and transnational frame and to focus explicitly on how kawaii’s globalization has shaped Asian American culture and politics. A URC grant will support the completion of this book project through a course release and travel funding.

Jinyu Liu, PhD

PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, HISTORY

Outsiders in Town: Mobility, Exclusion, and Negotiation in the Roman West (First – Third Centuries CE)

The proposed book project investigates the less favorable aspects of the experiences of (im)migrants in the early Roman Empire, challenging the overly optimistic views prevalent in contemporary scholarship concerning the interaction between (im)migrants and the local populace in the Roman world. In particular, I focus on six areas of inquiry: 1. the (im)migrants’ limited access to local benefits; 2. ethnic profiling; 3. various forms of exclusion in the occupational sphere; 4. marriage options; 5. spatial experiences of the (im)migrants; 6. (im)migrants and their religious practices. This project serves as a necessary corrective to the existing disproportionate emphasis on integration and connectivity within the ancient world. By centering on individual identities and the challenges encountered by individuals who moved around or permanently relocated within the Roman Empire, my research highlights the tangible

and intangible costs associated with navigating rights, obligations, and necessities in their new environments. It is certainly not my intention to negate the importance of integration or to dismiss migration as a catalyst for change, nor to discount the agency of (im)migrants. However, it is essential to emphasize that the process of integration was neither straightforward nor universally positive. Structural barriers and exclusionary phenomena complicated integration efforts, resulting in inclusion through exclusion in certain instances. Ultimately, by examining the structural barriers that elevated negotiation costs for immigrants from diverse backgrounds in the Roman Empire, my research contributes to a broader dialogue regarding whether empires generally manage ethnic diversity more effectively than nation-states, presenting counterarguments to this notion.

Alonso Llosa, MFA

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, FILM AND MEDIA

Lagarto, a narrative short film

Lagarto is a narrative short film that follows a woman's search for her deceased father's body in an abandoned mining camp in the middle of the Peruvian Amazon rainforest. The film explores the theme of abandonment from dual perspectives: the personal abandonment experienced by a child from a parent, and the environmental abandonment inflicted by those entrusted with its care. The film will be shot entirely in the outskirts of the city of Puerto Maldonado in Peru and the majority of the crew will be Peruvian. The completed project will serve both as a standalone short film and as a proof of concept for *Discoman: The Voice of the Jungle*, a narrative feature film with a runtime of 90 minutes. Presenting the film at international film festivals will serve as significant accolades for both myself and Emory University's Film and Media department. More importantly, however, will be the opportunity to expose audiences to the increasingly deteriorating conditions of the Amazon rainforest.

Malinda Lowery, PhD

ASSISTANT PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, HISTORY

Black, Native, and Southern Foodways

Black, Native, and Southern Foodways is a documentary film project focusing on Black and Indigenous foodways in the U.S. southeast. My proposal to the URC funds the second phase of the project, which includes post-production and additional travel for a 30-minute documentary film suitable for screenings in cultural centers, schools, and community institutions, as well as film festivals. Through historical and ethnobotanical research with Black and Native North Carolinians, this film seeks to answer an urgent question for the health and welfare of these communities and the land they steward: what will it take to re-Indigenize southern food and the food system? The film demonstrates how Black and Native people in the American southeast are reconnecting to one another after centuries of forced separation; how farmers, chefs, and herbalists are reclaiming their food traditions and restoring ecosystems with heirloom ingredients; how they are taking charge of the southern food story; and how they are advocating to change a food system which has brought disastrous health outcomes to people and their environments. Using ingredients created in the Americas and those that migrated here from around the world, the film shows these traditionally marginalized communities taking center

stage to navigate identity, memory, and belonging in a Southern landscape shaped by colonization and displacement.

Sarah Rodriguez, PhD

ASSOCIATE PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, RUSSIAN AND EAST ASIAN LANGUAGES AND CULTURES

Growing Old: A History of Aging in Global China

By 2050, over one-third of China's population will be at least 60 years old and retired. Yet state efforts to meet the needs of the swelling senior population have not kept pace with demand for eldercare. Since the late 1970s, the rollback of the collective-era social safety net, uneven economic development, and limited healthcare have compounded the challenges senior citizens face. My proposed monograph, "Growing Old: A History of Aging in Global China," investigates how these shifts have shaped experiences with aging in three Chinese locales with differing social welfare policies and levels of economic development: Shanghai, Chengdu, and Shenyang. Drawing on archival research and interviews with 100 urban and rural retirees, this research considers when old age begins and how gender, ethnicity, and class have influenced the timeline of aging since the 1949 Communist revolution. "Growing Old" also explores how different models for addressing eldercare—the traditional multigenerational household, the Soviet socialist approach, and the privatized American model—have historically informed China's approach to this issue. Additionally, this research connects Mainland and overseas Chinese diaspora experiences with aging. Focusing on nursing homes for Chinese immigrants in New York City, "Growing Old" compares eldercare in the People's Republic and the US. This project not only provides a historical framework for interpreting China's contemporary demographic challenges, but it also positions these findings within global trends.

Holli Semetko, PhD

PROFESSOR, EMORY COLLEGE OF ARTS AND SCIENCES, POLITICAL SCIENCE

A Cross-National Comparative Study of the Drivers and Consequences of Affective Polarization in Mexico and India

The growing problem of affective political polarization in the U.S. is the focus of a substantial body of research but less is known about its prevalence in non-western multiparty contexts. To address this gap, we compare the drivers and consequences of affective political polarization in Mexico and India. We address a number of hypotheses framed as questions here: What are the drivers and consequences of affective polarization? Are more frequent and politically attentive users of social and traditional media more likely to be affective partisans than partisans or others including first-time voters? Are affective partisans stronger party supporters than partisans? Do affectively polarized partisans in winner and loser camps display more or less trust in government leaders? Do they display more extreme emotions? This cross-national comparative study will make important and novel contributions to the concept and measurement of negative partisan affect and the prevalence of affectively polarized partisans in two large understudied countries in the global south. Measuring attention to political news, media use, and more, the study models influences on vote choice among affectively polarized partisans as distinct from partisans for each party controlling for demographics. We also model influences on trust and emotional reactions among affective partisans, partisans, and others in winner and

loser groups. Results will be published in academic journals and reported in news articles by the authors in both countries along with policy recommendations. Results will be the basis for external grant proposals to extend this research to a larger number of countries.