Emerging Scholars Program

2026-2027 Job Descriptions

POSITIONS OFFERED IN THE FOLLOWING FIELDS

ARTS

Position #1: Jazz Music, education, performance, social media, promotion

Mentor Name: Matt Otto

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project Description: This project offers a rare opportunity to work directly with Matt Otto "" Associate Professor of Jazz Studies at the University of Kansas and one of the most highly respected saxophonists in the Kansas City jazz scene. KCUR Otto has recorded on over 15 CDs as a leader on Origin, Noir, and Jazz Collective Records, and appeared on more than 50 projects as a sideman University of Kansas School of Music, with work spanning New York, Los Angeles, Japan, and beyond.

The student would help promote original jazz educational and performance materials through social media and contribute creatively to how those materials are developed and presented to new audiences. This means content planning, graphics, short-form video, and finding compelling ways to bring jazz to younger listeners locally and online. The role fits a creative cycle: Otto composes, performs, records, and teaches and the student helps translate that work into a dynamic public presence, then uses audience response to shape what comes next. Great fit for students interested in music, music business, media, marketing, or arts administration especially those with a passion for jazz.

Potential Job Tasks and Responsibilities: This is a flexible, creative position built around your schedule and skill level. Tasks grow naturally over time - no one is thrown in the deep end. To start, you might help schedule social media posts, design simple graphics for upcoming performances, and track what kinds of content connect with audiences. If you're comfortable with Canva, Instagram, or basic video editing, you'll hit the ground running, but these skills can also be learned on the job. As you get comfortable, you might shoot and edit short video clips from performances or rehearsals, help brainstorm ideas for educational content, or contribute to planning around a specific release or concert campaign. Over time, students who want more involvement are welcome to take on a larger creative role helping shape the overall direction of the project's public presence and contributing ideas to new educational materials. Every week looks a little different, and there's real flexibility in how we work together. The goal is for this to feel like a meaningful creative collaboration not a checklist.

Student Qualifications & Characteristics: No prior experience required - curiosity and enthusiasm matter more than credentials here. A good fit is someone with a general interest in music, social media, or creative media production who enjoys collaborative, low-pressure work. Comfort with tools like Instagram, Canva, or basic video editing is helpful but can be learned on the job. Being reasonably organized and a good communicator goes a long way. Scheduling is flexible and built around your availability. There will be one short weekly check-in online or in person at a time we figure out together, and most work can be done independently. A love of music is a definite plus, but what matters most is that you're genuinely interested in the project and bring some creative energy to it.

Position #2: Interpretative Phenomenological Analysis of Emotional-Approach Coping Strategies of Board-Certified Music Therapists in Cancer Care

Mentor Name: Cindy Colwell

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project Description: As a follow-up to a Feasibility Study (published) and then Scoping Review (in review for publication), our research team (two faculty from KU and Western Michigan University) and undergraduate students, will be designing and completing a study looking at Emotional-Approach Coping

Strategies of Board-Certified Music Therapists (MT-BCs) in Cancer Care. We will be designing an Interpretative Phenomenological Analysis (we will teach you what this is and how we will do it), and then selecting MT-BCs who work in Cancer Care. We will design a semi-structure interview to determine their lived experiences facilitating Emotional-Approach Coping Strategies of Emotional Expression and Emotional Processing. We will transcribe and analysis their interviews and present the data to determine what MT-BCs are doing during their bedside sessions. The student will be part of this process from inception through presentation and eventual intended publication. This will be the third study in a research line targeting MT-BCs working in Cancer Care.

Potential Job Tasks and Responsibilities: providing operational definitions for diverse terminology

- performing literature searches in diverse databases to support rationale for interpretative phenomenological analysis
- scheduling interviews
- checking transcripts of interviews
- data analysis of transcripts
- writing and editing manuscript components

Student Qualifications & Characteristics: We schedule the weekly meeting (one hour) based on the combined schedules of the research team. Reliable, punctual, organized, open to learn new skill sets and willing to work on more than one research project of different methodologies concurrently are preferred skill sets and characteristics. An interest in music or music research is not mandatory but beneficial for engagement in the various projects and tasks.

Position #3: Francis Poulenc: Complete Works, Volume 1

Mentor Name: Colin Roust

Location: Remote Only **# of Positions: 2**

Project Description: Last year, an international team of scholars began laying the groundwork to prepare a complete works edition for Francis Poulenc. The student will help me do the foundational work that is needed for the first volume, which includes the piano music that he composed from 1918 to 1927.

Potential Job Tasks and Responsibilities: The student will help with locating and acquiring (via interlibrary loan) all published versions of each piece in the volume. The student will prepare PDF scans of each located score. The student will assist in identifying all differences between the various editions of each piece. If time is available, the student will help code these variants for the editorial notes section of the volume.

Student Qualifications & Characteristics: Scheduling requirements: weekly meetings (in-person or online) for 1 hour. Most work will be done independently. Characteristics: attention to detail and organization are absolutely necessary; basic familiarity with Excel or Google Sheets required; ability to read music recommended but not required. Interests/Professional goals: Ideal for students interested in music, history, librarianship, etc.

Position #4: Planetary Simulants Lab Assistant (Cross-listed in Natural Sciences)

Mentor Name: Steve Gurysh

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: The Planetary Simulants Lab is seeking an emerging scholar who will work directly with Associate Professor Steve Gurysh from the Department of Visual Art during his Keeler Intra-University Professorship collaborating with Dr. Benjamin Sikes in the Department of Ecology and Evolutionary Biology. This research project in the arts and sciences will explore materials known as "planetary simulants" which describe a class of Earth-based minerals (dust, rock, soil) that are designed to mimic the physical, chemical, and geotechnical properties of other planets and moons. The goal of the Planetary Simulants Lab is to understand how simulant materials can be devised and manufactured, exploring how simulants can be used as a material in art, architecture and design, as media for biological life, as well as how they might be useful to think about the complexities of exchange with other planets.

Potential Job Tasks and Responsibilities: Emerging scholars in the Planetary Simulants Lab will assist with hands-on and scholarly research ranging from:

- Helping generate a directory of global manufacturers that produce a variety of research-grade simulants such as Mars Global Simulant, Lunar Regolith Simulant, etc.
- Conducting internet or database research to identify major researchers, papers, and themes related to simulants and their applications.
- Assisting mentors with learning how to use specialized equipment, working in arts-based fabrication labs in the Visual Art Department in Chalmers Hall to conduct material testing, such as firing simulants at different temperatures in kilns to explore their ceramic properties, or combining simulants with different binders, resins, waste materials, and biosolids to test their applications as a building material.
- Accompanying mentors to lab visits across KU campus, such as the Sikes Microbial Lab in Higuchi Hall, to develop samples that combine these simulant materials with biological media. - Photographing and documenting material samples, fabrication methods, process, and results of their applications.

Student Qualifications & Characteristics:

The Emerging Scholar must be available for a minimum of 4 hours per week, which includes one 3 hour block of in-person work and at least 1 hour of asynchronous independent research per week.

- Students should be curious, reliable, organized, detail-oriented, willing to learn, and independent in managing their time. The ideal candidate should have an interest and enthusiasm for arts and science research which includes:
- Either experience or interest to learn about processes in Sculptural and Ceramic fabrication while demonstrating an eagerness to learn best practices, demonstrate an attention to detail, and ability to follow proper safety protocols when working with lab equipment and materials.
- Either experience or the interest to learn about research in biological, material, and planetary science, since we will be working with materials that have broad applications in understanding the geochemistry of other planets.
- Students are encouraged to enroll in either a Sculpture, Ceramics-related course

Position #5: Research Assistant, Music Education

Mentor Name: Christina Svec

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: Every person is innately musical, no matter their understanding, skill development, or achievement level. Therefore, no matter your personal interest in music, you will provide a meaningful contribution! No previous research experience is required, although experience using Excel spreadsheets will be helpful.

With that said, there are several research projects that will be either in the phase of data collection or data analysis next year. Project 1 seeks to find instrument validity of an online music audiation measure for children. Projects 2 and 3 will be investigating potential relationships across health/wellness and singing voice development within several populations. Project 4 will be checking for test-retest reliability of a singing ability self-efficacy measure.

Potential Job Tasks and Responsibilities: Scholars will be tasked with:

- data entry and organization
- data cleaning
- online/social media recruitment efforts
- using AI to locate code for specific analyses

Student Qualifications & Characteristics:

- mandatory 30-60 minute weekly meetings, either in-person or remote, based on your specific availability
- detail-oriented
- previous musical experience might be helpful (but not required) to assist in shaping narratives

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BUSINESS AND COMMUNICATIONS

Position #6: Everyday Work with Artificial Intelligence

Mentor name: Cameron Piercy

Location: Hybrid: In person & remote **# of positions: 3**

Project description: Are you interested in how people work with complex technologies (like algorithms, artificial intelligence [AI], and robots)? This is an opportunity to understand how people work with complex technologies in everyday work. In this position, you will help track new findings in technology at work. We'll work together with the other members of the HMC lab on experiments and surveys to better understand AI in everyday life. The only requirement is an interest in technology and work. Past projects have been published, presented at conferences, and the 2025-2026 work is currently being analyzed. Pending grant funding this year some lab members may be building robots with the KU robotics club. Students work with each other and the PI on topics which most interest them. Any major is welcome past students have been in psychology, computer science, biology, intelligence, communication, and other majors. Everyone can participate.

Potential Job Tasks & Responsibilities: All scholars will help find research, summarize/synthesize findings, and write up research reports. Other tasks include:

- Help maintain a growing database of human-machine communication research (see
- https://hmc.ku.edu)
- Help design and collect experimental data involving interaction with AI.
- Create and distribute new surveys to folks who work with emerging technologies like algorithms, artificial intelligence, and robots.
- Meet weekly with lab members including other Emerging Scholars and PhD students.

2026 will involve some indexing editing of lab director's book called "Teaming with Machines: How Contemporary Teams Collaborate with Complex Work Technologies."

- (Optional) Students who are interested in coding may have opportunities to learn and practice coding.
- (Optional) Students who are interested in building a 3D printed robot with open source software can participate in researching and building the bot.

Student Qualifications & Characteristics: Scheduling is flexible, students can work in-person or online. Interest and curiosity are the most important skills for students considering this job. This position is suitable for social science students (e.g., students from psychology, sociology, public administration, communication studies, business) or professional programs (e.g., computer science, engineering) are welcome to apply.

Position #69: Student Poll Workers Project

Mentor name: Emily Vietti

Location: Hybrid: Remote Only **# of positions: 1**

Project description: We are working to create a training program for college students who may be interested in learning how to participate in the democratic process as poll workers on Election Day in their home communities. First, our Emerging Scholar will help us gather information about poll worker training/eligibility across the state of Kansas, and help us identify and gather information about similar programs that already exist for other states/populations. Then, our Emerging Scholar will have the opportunity to learn and practice how to gather relevant academic research about a topic. Finally, our Emerging Scholar will help us develop the curriculum and help plan the training for our first student poll workers trainings, targeted for Summer/Fall 2027.

Potential Job Tasks & Responsibilities: Our Emerging Scholar could expect to contribute to the project in the following ways (and maybe more!): 1. Finding and gathering relevant information about similar programs via internet search 2. Organizing information in spreadsheets 3. Using library databases to collect relevant articles/books 4. Conduct interviews with county officials about poll worker requirements and/or training 5. Practice academic writing by organizing information about what we know about student participation in voting and democracy 5. Help create training modules for students about how to be a poll worker 6. Event/training planning and logistics.

Student Qualifications & Characteristics: The Scholar should plan to meet with me once per week, for 30 minutes, via Teams/Zoom to check in on progress and to set goals for the next week. Once the Scholar has their fall schedule, we will schedule a weekly meeting time that we keep throughout the semester (and adjust accordingly for the spring semester!) Nearly all of the other work that our Emerging Scholar will be doing will be able to be accomplished on their own time/schedule, although they may occasionally need time during regular business hours to conduct short phone interviews. As such, our Emerging Scholar needs to be good at managing their time, so they are able to find the time to complete the work weekly. I/we will help mentor you on time management and organization, as we recognize that your first year of college is a HUGE life adjustment, and you may be needing to reform and modify the practices you have built for high school success to reflect this change. Ideally, our Emerging Scholar feels confident in their communication skills and comfortable meeting mostly online, as I am situated on the Edwards campus and do not have an office on the Lawrence campus for in-person meetings regularly. Finally, our ideal Emerging Scholar has an interest in community and/or civic engagement, and in making their world better. It will be useful to have an understanding of why it matters for young people to participate in democratic systems and engage with their communities (or a strong interest in learning more about it!)

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ENGINEERING AND COMPUTER SCIENCE

Position #7: Wetlands and Water Quality – how do water movement and vegetation enhance contaminant removal?

Mentor Name: Amy Hansen

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: Streams and rivers in the midwestern U.S. are often polluted by excess nutrients. Wetlands that are connected with streams and rivers can clean water by slowing it down, so it has more time to interact with wetland plants and microbes. In this project we will complete experiments in local wetlands where we use sensors and collect samples to measure water velocity and chemistry. We will also install sensors in field sites to monitor changes in water depth and chemistry during intense rainfall events. A second goal of this project is to promote healthy wetlands and streams by developing outreach activities aimed at teaching the public about wetland functions.

Potential Job Tasks & Responsibility: In this project, the Emerging Scholar will work with other students to run experiments in local wetlands and complete chemical analysis in the laboratory on the samples they collected. They will measure water velocity, collect water, and soil samples, prepare samples for analysis, and complete general laboratory-based tasks. The student will also download data from sensors and create graphs to share experimental results. In the springtime, the student may participate in outreach events at Baker Wetlands. No experience is necessary - the student will be trained on the job and work closely with other members of the research group. After students have gained experience with the equipment and lab protocols, they may develop an independent research question to be tested in parallel to the planned experiments.

Student Qualifications & Characteristics: The successful student will enjoy being in nature and solving problems. Our research is both outdoors and in laboratories so the student should be prepared to work in both environments. Field experiments are subject to weather and other unforeseeable challenges so being flexible and being determined is necessary. We welcome questions, creativity, and critical thinking. Finally, much of the work will be in collaboration with other students so clear communication and consistent work times is needed.

Position #8: Engineering Research on Next-generation Lithium-ion Batteries

Mentor Name: Lin Liu

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: Currently, we are supported by NASA and National Science Foundation to develop a next generation rechargeable battery; The students will work approximately 4-7 hours per week during academic sessions in the research laboratory of Dr. Lin Liu at the KU Lawrence campus. Dr. Lin Liu research program involves electrochemistry modeling and experimentation including but not limited to batteries and fuel cells design and fabrication. The students will initially assist Dr. Liu and his graduate students in specifying, acquiring, and troubleshooting new instrumentation for the lab, and subsequently, designing experiments, performing experimentation.

Potential Job Tasks & Responsibilities: The duties may include:

- Designing and conducting experiments involving prototypes of next-generation battery concepts, and/or novel designed biomimetic self-assembled, hierarchical nanostructure.
- Simulating batteries and fuel cells electrochemical performance during calendar life and cycle life.

- Assisting in the specification and calibration, testing, and characterizing of various instruments.

The students will also:

- Review the pertinent literature.
- Fabricate newly-design batteries or fuel cells.
- Analyze data.
- Prepare and present routine summaries and presentations (oral and written) involving
- literature reviews and research results.
- Help prepare scientific manuscripts for publication.
- Prepare presentations for undergraduate and graduate research competitions.

Student Qualifications & Characteristics:

- Excellent performance in high school math classes and an interest in engineering
- Strong oral and written communication skills.
- Strong organizational and time management skills.
- Interest in learning more about graduate-level research.
- Interest in prototyping hardware in a research setting
- Interest in possibly continuing in the position through summer of 2026 and the next academic year.
- Women and minorities, and candidates who will contribute to the climate of diversity in the
- School of Engineering, including a diversity of scholarly approaches, are especially encouraged to apply

Position #9: Fatigue & Fracture - Research in Structural Engineering

Mentor Name: Caroline Bennett

Location: Hybrid: In-Person and Remote **# of Positions: 3**

Project Description: This project is aimed at exploring the structural performance of steel and aluminum highway structures, including bridges, large overhead highway sign structures, and tall lighting structures. In particular, the project is aimed at characterizing the performance of these highway structures with regard to fatigue cracking and sudden failure through brittle fracture and developing techniques to minimize such failures.

Potential Job Tasks & Responsibilities: Potential student tasks include the following:

- Preparation of laboratory fatigue and fracture tests. This could include creation/fabrication of test specimens, inspection of test specimens for fatigue cracking, and installation of instrumentation.
- Execution and monitoring of physical laboratory tests. This could include inspection of test specimens for fatigue cracking, recording test data, manipulating test data, etc.
- Involvement with computer simulations of structural behavior. This could include the creation of computer simulations, or manipulation of existing computer models.
- Manipulation and analysis of experimental and analytical data. This could include plotting data using Excel (or other software) and presenting findings in written and spoken communication formats.
- Participation in weekly research meetings

Student Qualifications & Characteristics: Successful applicants for this position should:

- Exhibit responsible behaviors, including email responsiveness, good time management, attention to detail, and organization skills. Be interested in learning more about structural engineering, which is a subfield of both civil engineering and architectural engineering. Students should be available for minimum blocks of time of two hours at least a couple of occasions a week.

Additional Comments: The fatigue and fracture research group is vibrant and diverse! We aim to make the built environment safer and more reliable.

Position #10: Visualization for Understanding Complex HPC and Data Science Algorithms

Mentor Name: Hongyang Sun

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project Description: Many complex algorithms (e.g., involving matrices, graphs, and sequencing or combinatorics) in data science and high-performance computing (HPC) are hard to understand, even for experts. Yet, their importance has been underlined by the many use cases that rely on these algorithms to perform essential computations and data analysis. The goal of this project is to develop tools to visualize the working of these algorithms and make them easy to understand for both education and research purposes. The project involves understanding some important algorithms in the domain with the help of the faculty advisor and using simple tools, such as MS PowerPoint, or more sophisticated tools such as Python animation packages to create comprehensive visualizations under certain guidelines. The outcome will benefit both future students learning these algorithms and facilitate future research around these algorithms. This is currently considered a standalone project, but could be integrated into teaching or a future research project of the faculty advisor.

Potential Job Tasks and Responsibilities: The student is expected to be familiar with MS PowerPoint (for creating visualizations) as well as basic math (for understanding the algorithms). Knowledge of the programming language Python is a plus, but not required for the start. The algorithms to be visualized will be conveyed to the student upon the start of the project, but the faculty advisor will guide the student along the way through regular meetings.

Student Qualifications & Characteristics: The student is expected to be motivated, responsible, and committed to the project. Regular meetings with the faculty advisor in person or remotely are required.

Position #11: Machine Learning, Signal Processing, or Web Programming for Radar Systems

Mentor Name: John Paden

Location: Hybrid: In-Person and Remote **# of Positions: 1 or 2**

Project Description: The Center for Remote Sensing and Integrated Systems (CReSIS) designs and develops radar systems and conducts ground based and airborne field experiments in the polar regions with those systems. CReSIS also houses the Open Polar Radar organization which is an international data

repository and computing facility storing and processing 2000 TB of raw data collected by polar radar systems. CReSIS is interested in student research assistants interested in working on a team of engineers and scientists on a variety of research problems and tools to understand, analyze, and serve the radar data via the web for the international glaciology science community.

Potential Job Tasks and Responsibilities: All positions require that the student learns and has an interest in programming or computer-aided design (CAD). The programming projects will be co-designed with the mentor and student and focus on an area that the student would like to pursue in signal processing, machine learning, embedded software development, printed circuit board schematics and layouts, web programming, or geographic information systems. The students will participate in weekly meetings and will be guided on how to make weekly status report presentations at the meetings.

Student Qualifications & Characteristics: We expect qualified students to be:

- interested in being a part of, and contributing to, a strong and supportive team environment that respects everyone;
- able to pay attention to the importance of coursework and self-care, and balance that with the demands of the research position;
- studying one of our core fields: electrical engineering, computer engineering, or computer science; or studying in another program with a specific interest in learning engineering and computer science topics (e.g. geography majors interested in programming geographic information systems).
- willing to work hard and hold themselves accountable to support the project objectives and tasks and to gain the technical and academic skills required to perform the research tasks

Position #12: Human-Robot Iteration (HRI)

Mentor Name: David Johnson

Location: Hybrid: In-Person only **# of Positions: 1**

Project Description: The purpose of the project is to study the interaction between a human and a humanoid robot programmed to act as a companion to the human. As a companion, the robot will be designed to engage the human in conversations that might typically occur between two human companions. A lot of the work will be testing different robot programs to see which ones cause the human to want to engage in a conversation with the robot.

The student will be working on the robot in the EECS computer science design lab where I will meet with them briefly each week.

Potential Job Tasks and Responsibilities:

The student will learn how to program a humanoid robot to interact with humans. Then, the student will conduct experiments to collect data on the interaction between humans and the robot using standard methods. The ultimate goal will be for the student to prepare a research paper for submission to a scientific journal.

Student Qualifications & Characteristics:

Currently taking or completion of EECS 138, EECS 168, **or** equivalent high school or middle school programming course.

Position #12: AI4Healthcare: Developing Evaluation Harnesses for Medical AI
Mentor Name: Zijun Yao
Job Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: While Large Language Models (LLMs) show incredible promise in healthcare, they cannot be safely deployed in clinical settings without rigorous, specialized testing. General AI models can sometimes "hallucinate" or fail to understand complex medical context. Our research focuses on building a "harness system" for health intelligence, a comprehensive, automated evaluation framework designed to rigorously benchmark and test AI models on specific medical tasks. By creating this testing harness, we evaluate how accurately and safely these models process clinical texts, medical reasoning, and longitudinal healthcare data. The goal of this project is to create the standardized "test exams" that ensure future medical AI tools are robust, factual, and ready to assist healthcare professionals in improving patient care.

Potential Job Tasks & Responsibilities: You will work closely with a senior graduate student mentor to support the development of this AI evaluation framework. Your primary responsibilities will include conducting literature surveys to understand the current standards in medical AI testing (e.g., finding out how other scientists measure AI accuracy in medicine), and assisting senior students with research implementation. Daily activities in the lab may involve searching for and categorizing open-source medical datasets (like medical Q&A or clinical summaries), organizing test data into spreadsheets, helping run evaluation scripts to test different AI models, and summarizing the results. No prior research or heavy coding experience is necessary, we will teach you how to navigate scientific literature, format datasets, and understand the basics of AI evaluation. In addition to your research work, you will meet weekly with your graduate student mentor (60 min, in person or virtual) and be invited to attend weekly lab meetings (1 hour, in person or virtual). Occasional remote work may include reading journal articles, data organization, and creating summaries of findings.

Student Qualifications & Characteristics:

- Desired behaviors: email responsiveness, good time management, attention to detail, organization skills, willingness to learn, curiosity, and asking questions.
- Majoring in Computer Science, Computer Engineering, Electrical Engineering, or a similar engineering/science field.
- Familiarity with basic programming (e.g., Python) and ML fundamentals. A strong willingness to learn is the primary requirement.
- Familiarity with Microsoft Office (Word, Excel, PowerPoint) or equivalent tools.
- Available to work on campus or in the lab during normal business hours for at least 2-hour blocks of time.

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HUMANITIES

Position #13: Esoteric Fascism, New Age Culture, and the Crisis of Masculinity

Mentor Name: Christopher Forth

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: This project explores the surprising overlap between "New Age" spiritual beliefs and practices, esoteric fascism, and the so-called crisis of masculinity in Western societies as expressed today in social media and other online networks. "Esoteric fascism" refers to a onetime marginal strand of far-right political culture emphasizing "spiritual" links to imagined white homelands, hollow earth theories, Nazi UFOs, and depictions of Hitler as a kind of transcendent being, aspects of which are alive in meme culture and other online practices. Albeit seemingly unrelated, all three of these tendencies alternative spiritualities, esoteric fascism, and crises of masculinity have historically deplored the physical and "spiritual" impact of urban modernity while promoting conspiracy theories and utopias of various sorts. As their technology-driven entanglement in the present has become increasingly evident, this project proposes that alternative wellness and spiritual cultures have at times engaged with esoteric versions of fascist ideology as ways of promoting the regeneration of white masculinity.

To support this argument this project:

- surveys the past and present links between white masculinity and esoteric fascism;
- explores far-right flirtations with New Age ideas and imagery in select social media platforms; and
- analyzes how user comments register a variety of responses to these beliefs and practices. Overall, this project sheds light on more subtle and less examined dimensions of male complaint in the modern world.

Potential Job Tasks and Responsibilities: The research for this project would take place almost entirely online, and student researchers would be given a variety of options for what they may wish to explore. What is broadly referred to as the online "manosphere" will be the primary focus, with special attention given to far-right or "alt-right" websites, forums, and channels. Research will be mostly restricted to Anglophone materials, which could include social media platforms from North America, Britain and Ireland, Australia/New Zealand, and South Africa. However, students with proficiency in other languages may be invited to focus on relevant materials in different locations. In some cases, this includes taking screenshots from relevant websites and downloading video content from YouTube, Tik Tok, and Telegram as well as more "alternative" platforms like Bitchute, Parler, etc. In others it may entail the extended exploration of one or more particularly large websites and channels, such as AlphaAffirmations, Return of Kings, and the 21 Studios. The project is thus sufficiently broad to allow for considerable flexibility depending on student skills and interests. Weekly or semiweekly meetings (either remote or in person) as well as careful note-taking are expected.

Student Qualifications & Characteristics: While students considering a major in gender studies, media studies, or religious studies would be ideal, anyone interested in social science or humanities disciplines should be able to do this work. Of course I will be on hand to assist as needed, but the preferred student researcher would have the maturity and sense of responsibility needed to conduct research without direct supervision while providing weekly or semiweekly updates, reports and notes.

Position #14: Student Researcher Assistant to the Druze Studies Systematic Review Project

Mentor Name: Rami Zeedan

Location: Remote Only **# of Positions: 2**

Project Description: Join a collaborative project to conduct a "Scoping Systematic Review: Druze Scholarship 2025." This project aims to comprehensively overview existing academic literature on the Druze across the Middle East (Syria, Lebanon, Israel, Jordan) and diaspora communities. You will gain hands-on experience conducting a systematic literature review, a crucial research skill while delving into Druze's rich history, culture, and society. This focused project will culminate in a co-authored peer-reviewed article for submission to the Druze Studies Journal (see example: https://journals.ku.edu/druze/article/view/22381). Additionally, you can present your findings at the KU undergraduate research symposium and the Druze Studies international conference (see example: https://druze.ku.edu/2025druzeconference).

Potential Job Tasks & Responsibility:

- Conduct a systematic literature review, including database searches, article screening, and data extraction.
- Contributes to the development of a comprehensive bibliography and literature review.
- Co-write the manuscript for the Druze Studies Journal, and help in responding to revisions required by peer reviewers
- Prepare and deliver presentations at the KU undergraduate symposium and co-present at the Druze Studies international conference in 2026
- Contribute to the project's overall research goals and timeline.

Student Qualifications & Characteristics:

- Highly motivated and well-organized student with a strong interest in research.
- Ability to work independently while collaborating effectively.
- Commitment to the project for two semesters: Fall and Spring or Spring and Summer.
- Interest in Middle Eastern studies, cultural studies, or related fields is highly desirable.
- Willingness to learn and master systematic review methodology.
- Strong written and oral communication skills.

Position #15: Research Assistant, Improvising Across Abilities: The Adaptive Use Musical Instrument

Mentor Name: Sherrie Tucker

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: This is an interdisciplinary research project on collaborative, interactive all-ability musical improvisation using the Adaptive Use Musical Instrument (AUMI). AUMI is a free download (aumiapp.com) that uses camera-tracking technology to adapt sound to movement of users across a wide range of abilities, including mobility, sensory perception, cognitive processing, and neurodivergence. The research questions posed by this project include: how can creative improvisation across ability create more inclusive communities, increase mixed ability social interaction, and create more inclusive aesthetics and artistic practices? The project is a collaboration among KU faculty in American Studies and Dance, in

partnership with Independence Inc. (a grassroots organization that serves people with disabilities), and the Sound+Vision Studio at the Lawrence Public Library.

Potential Job Tasks & Responsibility: The Research Assistant(s) will work as a liaison between faculty, community partners, and participants of the monthly all-ability jam sessions at Sound+Vision Studio, Lawrence Public Library. This includes working with contacts at the Lawrence Public Library and Independence Inc. to advertise the jam sessions and providing support for the jam sessions one afternoon per month. The research assistant should be prepared to arrive at the library early to help set up the iPads (on which the Adaptive Use Musical Instrument is downloaded) and assist participants of all abilities and ages throughout the jam session (one afternoon per month, between 3:00 – 6:00 pm). The Research Assistant must learn how to use the instrument well enough to demonstrate how to use it, but it is very user friendly. In addition, the Research Assistant will assist with website updates, social media, and related tasks.

Student Qualifications & Characteristics:

1. Must be available one day per month (to-be-determined) in late afternoon 3:00-6:00, for improvisation sessions at the Lawrence Public Library (includes set-up and pack-up time). Other hours are flexible.
2. Experience in interacting with people with disabilities as evidenced in application materials (need not be work experience; navigating the world as a disabled individual and/or having a family member with a disability absolutely counts).
3. Organizational skills as evidenced in application materials (email communications, scheduling, multi-tasking, keeping track of details).
4. Interest in creative expression, performing arts, and/or community music and social justice as evidenced in application materials (musical background not required).
5. Basic technical proficiency with laptop computers and/or tablets/iPads as stated in application materials.
6. Interest in learning about improvisation as stated in application materials.

Position #16: Mapping Memories of Slavery

Mentor Name: Elizabeth MacGonagle

Location: Hybrid: In-Person & Remote **# of Positions: 1**

Project Description: This research examines how museums and memorial spaces engage with issues of history, memory, and identity as they tell the story of enslavement. You would be helping to find information about places on the ground, known as sites of memory, that are intimately connected to the slave trade in the Americas, Europe, and Africa. These sites include monuments or other memorials as well as museums, old slave forts and piers, and even walking tours of port cities connected to the history of enslavement. This “global Africa” project connects African & African-American Studies with Latin American and Caribbean Studies -- and history with museum studies -- to provide a more global examination of the legacies of the slave trade. By focusing on the ways in which a range of museums and memorial spaces across the Atlantic and Indian Oceans remember (and forget) histories of enslavement, we can understand more about the shaping of our modern world.

Potential Job Tasks & Responsibility: You will help to build on an existing bibliography of sources about Atlantic spaces in Brazil, Guadeloupe, Cuba, the United States, and England connected to a history of slavery. Time permitting (and depending on student preference and any foreign language skills), you will also research secondary sources about relevant spaces in the western Indian Ocean world. Tasks will include working with KU Libraries and google scholar to find newer and relevant secondary works and other significant materials connected to various sites of memory.

Depending on your interest and skills, you may be asked to read parts of promising secondary sources to identify key ideas and examine the main points of the author. You might compile a list of sites of memory connected to slavery and organize this into a mini database. Additional tasks may include some photocopying or scanning of books and images. These responsibilities will contribute to analyzing the interplay of memory work at museums and memorial sites. Overall, you will help to develop a critical narrative about how the slave trade has shaped our past and the present.

Student Qualifications & Characteristics: No extensive knowledge of the history of the slave trade is necessary, though a desire to learn more about this time period and related issues of history and memory will be helpful. I am looking for a student who likes to investigate topics and do library and online research to gather evidence. Excellent organizational skills and attention to detail are both extremely important, since you will be finding, recording, and perhaps even analyzing research sources. A student who enjoys the humanities would benefit from this position, but I am open to a student in any major. Someone who likes to visit museums or monuments or stop to read historical markers would be in their element with this research! Most of the work can be done independently and remotely, but we will check in weekly so that you can share your findings and discuss the research process.

Position #17: Assistant Exhibition Developer

Mentor Name: Maggie Goddard

Location: In-Person Only **# of Positions: 3**

Project Description: The assistant exhibition developer will work in a gallery in KU's Biodiversity Institute and Natural History Museum to guide visitors in completing questionnaires about a historical exhibit. Their answers will help shape the development of a new exhibit. The student will track these responses by entering them in a database. The ideal student for this project is excited about history, natural history, and museums. This work will support the development of a new exhibit focused on the taxidermy mount of Comanche, a horse that survived the 1876 Battle of Little Bighorn. US reinforcement troops found Comanche wounded on the battlefield. They transported the horse to Fort Lincoln and later to Fort Riley in Kansas, where he died in 1891. The Army brought his body to naturalist Lewis Lindsay Dyche at the University of Kansas, a leader in taxidermy. For over a hundred years, the horse has been part of this museum. There have been different ideas about what his story means. The student will ask visitors: What do you know about this horse? What do you want to know? What does this horse mean to you? As we plan a new exhibit exploring the history of this horse, we invite visitors to participate in the process.

Potential Job Tasks and Responsibilities

- Invite visitors to complete questionnaires about a historical museum exhibit
- Track visitor responses by typing them into a database

- Find books and articles related to the history of taxidermy and animals on display at natural history museums
- Format citations for a bibliography
- Annotate the bibliography

Student Qualifications & Characteristics

1. The student will need to have a set schedule each week, though the exact schedule is flexible. The student must be available when the museum is open for at least two two-hour blocks a week.
2. The student must be organized, able to talk to museum visitors, and willing to ask questions.
3. The ideal student is interested in history, natural history, and museums.

Position #18: Journal Editorial Assistant

Mentor Name: Marta Caminero-Santangelo

Location: Hybrid: In-Person and Remote **# of Positions:** 1

Project Description: The editorial assistant will support the work of Latino Studies, a leading academic journal that publishes research on Latina/o/x communities, cultures, histories, politics, and creative expression. The larger goal of the project is to help circulate new scholarship in the field and connect readers with current conversations in Latino Studies. The student's main responsibilities will be to identify recently published books that may be appropriate for review, help locate potential reviewers with relevant expertise, and assist with outreach to scholars. The assistant will also help strengthen the journal's public presence by creating social media posts that highlight new issues, articles, book reviews, calls for submissions, and field-related news. This work fits into the research cycle by helping new scholarship reach wider audiences, encouraging scholarly exchange, and supporting the peer-review and publication process. The position offers hands-on experience in academic publishing, research communication, and professional networking.

Potential Job Tasks and Responsibilities

At the beginning of the year, the editorial assistant would start with concrete, entry-level tasks such as checking publisher websites, university press catalogs, journal announcements, and book prize lists to identify recently published books in Latino Studies that may be good candidates for review. The student would enter this information into a shared spreadsheet, including title, author, publisher, publication date, topic, and possible areas of expertise needed for a reviewer.

As the student becomes more familiar with the field, they would begin helping to identify potential reviewers by searching university department pages, faculty bios, recent publications, and professional profiles, then drafting short notes explaining why particular scholars might be a good fit.

The student would also help prepare social media content by drafting posts that highlight new articles, book reviews, calls for submissions, author accomplishments, and relevant field news. Later in the year, the assistant could take on more responsibility by helping maintain a calendar for review deadlines and social media posts, suggesting books or themes to feature, organizing reviewer contact information, and preparing brief reports for the editor.

Together, these tasks would provide at least four hours of work per week, with opportunities for additional hours through deeper reviewer research, expanded social media planning, and more systematic tracking of new publications in the field.

Student Qualifications & Characteristics

- The position offers flexible scheduling, but the editorial assistant should be available for a regular weekly check-in meeting with the journal editor or supervisor and should be able to complete at least 4 hours of work per week.
- Tasks will be completed independently and remotely, but the student should be able to work steadily and accomplish weekly goals/tasks, respond to email in a timely manner, and occasionally work in longer blocks of time when tracking books, updating spreadsheets, preparing social media posts, or researching potential reviewers.
- The strongest candidates will be organized, detail-oriented, reliable, self-motivated, and comfortable keeping careful records of books, reviewers, deadlines, and correspondence. A Humanities or Social Science major is preferred, and familiarity with Latino cultures and/or Spanish is also preferred. This position would be especially appropriate for students interested in Latino Studies, ethnic studies, literature, history, cultural studies, publishing, social media communication, editing, academic research, or graduate school. The work requires curiosity about new scholarship and a willingness to learn how academic journals help shape conversations in a field.

Position #19 Creating a digital archive for the Ch'orti Maya of Guatemala and Honduras

Mentor Name: Brent Metz

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description:

This project involves:

- compiling written sources, maps, photos, audio, and video about the Ch'orti' Maya of eastern Guatemala and western Honduras,
- digitizing them,
- uploading them to an archival web site, and
- make them presentable to the public in an Omeka story map.

The Ch'orti' speak the Maya language most useful for deciphering ancient Maya hieroglyphs, but they know little about their past and have been made to feel ashamed of their heritage by non-indigenous people who dominate national power structures. This project will not only make information accessible to the Ch'orti's but may also help stem their abandonment of the language and identity. Ultimately, it will hopefully serve as a jumping board for the few but increasingly highly educated Ch'orti's to carry out their own investigations and interpretations of sources about the Ch'orti's.

Potential Job Tasks and Responsibilities

- Digitize microcassette tapes of interview recordings with the Ch'orti's in Ch'orti'.
- Digitize/scan readings and photos on the Ch'orti's.
- Clean up/reformat English subtitles for videos in Spanish of poor farmers in the former Ch'orti' speaking region of Guatemala, Honduras, and El Salvador. (letters overlap, too many words on the screen, etc.)
- Potentially help the professor seek publisher permissions to use sources on Omeka story map.
- Input digitized materials into an Omeka CMS storage site.
- Potentially create brief descriptions for the stored digital materials

- Help the professor decide the most effective presentation for the Omeka story map site

Student Qualifications & Characteristics

- Bilingual Spanish/English speaker preferred but not required
- Interested in helping indigenous Maya people
- Knowledge of or comfort in learning digital public-facing online platforms
- Not timid about asking questions of the professor - Ability to receive constructive criticism
- Ability to meet once per week for .5-1 hours
- Organized and focused on final product, not simply completing tasks to cross them off the list

Position #20: Digital Humanities Scholars

Mentor Name: John McEwan

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project Description: The Digital Humanities Scholars are a cohort of undergraduate students from across the university getting hands-on experience working on digital humanities projects by collaborating on faculty projects. Scholars participate in workshops, meet weekly with a member of IDRH staff, attend events, and receive training in DH methods and tools.

Potential Job Tasks and Responsibilities: Emerging scholars can work on a wide variety of tasks as part of a team that includes other undergraduates and faculty mentors. Generally, tasks involve data management, humanities research work, such as literature searches, and applying digital methods in support of humanities research projects. This last year, in the fall semester of 2025, students developed a website based on the book in support of the Hall Center for Humanities public outreach event. Constructing the website involved gathering information on the history of Lawrence for a digital map, creating accompanying posters, and helping the public engage with the digital project at the outreach event. In the second semester, in the spring of 2026, students collaborated with a faculty member on a data rescue project for the archives of the Kansas City Call, which is a long-established community newspaper. Students helped transfer data from CDs to a more modern format, organize the files, create reports, craft a digital public project (a website), and then present the project to various public audiences. These projects are indicative of the type of work that students will do in this position.

Student Qualifications & Characteristics: This is a humanities research position for students who anticipate pursuing studies in the humanities. Students are expected to be willing to learn digital skills, but they will be trained to do all required tasks. This is a good position for students who are interested in humanities research methods, careers in museums or libraries, and writing for a public audience. Students need a capacity to work independently with a high degree of attention to detail.

Position #21 Archival Assistant (requested edit to shorten PD)

Mentor Name: Abigail Fields

Location: In-Person Only **# of Positions: 2**

Project Description: What stories are told about the land around us? Who tells them and from where? What stories have been lost? What does it mean to engage with the land of Kansas as a site of story-telling? This project, Tales of Kansas Land, tries to answer some of these questions by constructing a multi-

disciplinary archive about land and land use practices in our state. The final product will be an interactive digital map of Kansas that layers different kinds of historical, cultural, and artistic materials onto the landscape, allowing users to explore the rich and complex stories connected to specific places.

Potential Job Tasks and Responsibilities

Below are some tasks and responsibilities that the assistant may be expected to do. I've organized these in stages to give a sense on the way that skills would build on each other. Depending on the assistant's availability and interest, these stages will advance more or less quickly. There is certainly 4 hours' worth of work to be done per week, and students could increase this as much as they would like beyond that!

- Stage 1: Orientation and Identifying Sources:
- Stage 2: Archival Exploration
- Stage 3: Analysis of Materials:
- Stage 4: Preparation for digital map
- Stage 5: Development of Public Humanities Project - In order to help with this stage, the student would need to develop some competency with digital humanities skills. As this would be an additional time investment, students would only be asked to do this if they were interested in it.

Student Qualifications & Characteristics

This position is open to undergraduate students from any major or discipline. No prior research experience or coursework in literature, history, or digital humanities is required. What matters most is curiosity, enthusiasm, and a willingness to learn!

- Scheduling - Available for a weekly check-in meeting with faculty mentor (time to be determined based on mutual availability)
- Can work remote when accessing/finding guides to identify archival sources and in later stages of the project
- Accessing archival documents will require regular visits to the Spencer Research Library. These typically work best in blocks of 2-3 hours, so student should plan for this. However, these visits can be scheduled any time during the library's opening hours, based on the student's personal availability

Characteristics

- Attention to detail and care in handling materials and maintaining organized records
- Reliability and follow-through
- Comfort working both independently and collaboratively - Enjoyment of reading and comfort spending extended periods with written materials. A significant portion of this position involves reading and summarizing archival documents, from handwritten letters and land surveys to newspaper clippings and literary texts
- Curiosity and a willingness to ask questions and flag uncertainties

Interests and Goals:

- Curiosity about Kansas history, land, agriculture, and the stories of rural and farming communities
- Curiosity about different kinds of storytelling
- Interest in how humanistic research (including literary analysis, cultural history and archival work) can speak to real-world questions about land, place, and community
- Openness to exploring digital humanities as an emerging and creative scholarly practice Students with an interest in research careers, graduate study, public humanities, museum or archival work, or

community-engaged arts and humanities programming or research will find this position particularly helpful to their professional development. But students from all areas and in all professional domains can benefit from the writing, organization, analysis and research skills that they will learn through this process!

Position #22: Explore how and why K-12 teachers teach about religious topics in public schools

Mentor Name: Anna Yonas

Location: Hybrid: In-Person and Remote **# of Positions:** 1

Project Description: I research teacher learning and challenging topics in social studies education. When I became a teacher educator, I was shocked to learn that my students believe religion is a controversial topic; many teachers avoid mentioning religion entirely, omitting large portions of global history and civic life. This project investigates how public school teachers teach about religion amidst legal precedents, political controversies, religious diversity, and growing concerns about religious illiteracy.

In this study, I will answer the research question "How do teachers teach about religion in public schools?" and the following supporting questions:

1. How do teachers understand the purposes, boundaries, and challenges of teaching about religion in public schools?
2. How do teachers describe the influence of their identities, preparation, and professional experiences on their instructional decisions related to religion?
3. When teachers plan to teach about religion, how is religion represented in the instructional materials teachers select or design, including framing, perspectives, and treatment of religious diversity?
4. What pedagogical strategies do teachers plan to use when teaching about religion?
5. What pedagogical strategies do teachers use when teaching about religion, including unplanned instructional moments? As a student assistant, you will be an active participant in working with me to explore these research questions based on data I will have collected. Based on your schedule, you may also help collect data!

Potential Job Tasks and Responsibilities

The student will assist in data coding and analysis. Tasks will include: Complete a research training to learn about data security and research ethics Track current events, including state legislation and school board regulations relating to teaching the Holocaust or teaching about religion in public schools Create a contact list of schools and teachers to survey / interview Transcribe interview and observation data Analyze survey data for descriptive characteristics (e.g., average score, frequency) Analyze survey data for how individual participants change over time And more based on student interest!

Student Qualifications & Characteristics

I am eager to work with a student who is new to research and interested in K-12 education, history, government, and/or religion. Prior knowledge of the Holocaust is preferred, as well as engagement with current events. The ideal student for this role has strong typing skills and is comfortable using Excel. I will teach you all research skills necessary for this role!

Position #23: Examining Clothing in America

Mentor Name: Zay Dale

Location: Hybrid: In-Person and Remote **# of Positions:** 2

Project / Job Description: The research assistant for this position will be tasked with helping me to examine and find representations of textiles (in particular clothing) in contemporary America and during American slavery. This position is related to a book project I am working on called "Fiber to Flesh: Textiles and Black Existence in American Slave Narratives." In particular, I examine representations of 4 major textile fibers: cotton, osnaburg, wool, and nylon. For this position, you will be tasked with helping me to continue the look at the representation of these fibers in many different slave narratives and in contemporary American culture (for the latter part, I am interested in nylon, which is an American made synthetic polymer and how, where, when nylon appears in contemporary media--like Instagram, TikTok, etc.).

Potential Job Tasks and Responsibilities

For this position, you will be tasked with reading slave narratives and examining social media for the representation of clothing. For your reading of slave narratives, you will be responsible for noting when, where, and how the enslaved talk about textiles (in particular clothing). I will not ask you for any type of analysis or "so what?" as that will be part of my own goal for this book. Rather, I will ask you to document and index your findings in a shared google doc, so that I can trace your work and we can talk about what you have found in our weekly meetings. As we progress throughout the academic year, I will then ask you for more analysis of how clothing is portrayed in social media. This will take much more critical thinking, but we will save this for the second half of the academic year. At that point, you should have learned the skills for documenting and analyzing material culture. So again, the first half of this will be looking at clothing in slave narratives, and the second half will be looking at clothing in contemporary media. We can also work to do the second part first should you find that to be a task that you would like to do first.

Student Qualifications & Characteristics

The ideal student for this position is a reader and someone who enjoys examining culture, material objects, and history in American media. The position is hybrid, but we will meet once a week for the first semester before shortening that down to once every few weeks to check in on your progress. While you don't need to be an English or even a humanities major, you should be interested in material culture and American history. Part of the work for this project is literary, historical, environmental, and even scientific, so any background is acceptable. The ideal student for this should be someone who can pay close attention to detail when they read and stay organized when documenting your findings.

Position #24: Turning Psychological Evaluations into Data: A school Psychology Project

Mentor Name: Erin Yosai

Location: Hybrid: In-Person and Remote **# of Positions:** 2

Project Description: Your role will fit into the early stages of the research cycle! In this position, your primary responsibility will be to digitize and organize psychological assessment records so they can be used for future research and analysis. We have a lot of data that is either waiting or ready to be analyzed; we just need it to be accessible (digitized)!. This means you will be working directly with confidential assessment documents and helping convert them into organized digital files. The Outcomes, Assessment

Services and Intervention Supports (OASIS) clinic at Joseph R. Pearson Hall provides psychological evaluations to the general population for mental health diagnoses. While this work is particularly connected to special education, it also applies broadly to mental health. If you are interested in learning what goes into a psychological evaluation, this is a great place to start. We conduct IQ tests, achievement tests, mental health assessments, and evaluations for autism, ADHD, and more. Right now, much of this information exists in paper or non-digital formats. By digitizing these records, you are helping create a dataset that researchers can later use to ask bigger questions like: Do we see similar patterns in how students are identified for learning disabilities? Do test results look different depending on the type of student or their background? Are students getting consistent results across different types of assessments (like IQ vs. achievement tests)? So, while your day-to-day work will focus on organizing and digitizing, your role is an important part of the process that makes research possible. You are helping build the foundation of the data that will later be used to better understand assessment and identification in school psychology!

Potential Job Tasks and Responsibilities

Main Tasks (What You'll Mostly Be Doing) Digitize and organize documents related to IQ tests, achievement tests, psychoeducational assessments, and learning disabilities Follow clear systems for naming, saving, and organizing files Help turn paper records into a dataset that can later be used to look at trends in assessment and identification Maintain organized and secure digital records Other Things You Might Help With (As Available) Assist graduate students with research-related tasks, including projects on: Trauma-informed practices Culturally and linguistically appropriate practices Anxiety assessment and intervention Family relocation and its impact on mental health and school experiences Differences in school psychology practices across regions/states Attend biweekly lab meetings and see how research ideas actually get discussed

Student Qualifications & Characteristics

Scheduling requirements:

- Available to work 4"“7 hours per week consistently
- Able to attend biweekly lab meetings

Characteristics and Skills:

- Responsible and able to handle confidential information (This is important!)
- Organized, Detail-oriented
- Okay with repetitive, task-based work
- Willing to ask questions and learn

Interest and Goals:

- Interested in school psychology, education, or mental health
- Curious about how students are assessed and identified for mental health, special education and school services
- Want to get your foot in the door with research

Position #25: Japanese war brides' oral history project

Mentor Name: Ayako Mizumura

Location: Hybrid: In-Person and Remote **# of Positions:** 2

Project Description: Following World War II, more than 50,000 Japanese women married US servicemen and migrated to the US. Many of these women settled in Kansas and the Midwest, navigating new lives far from their homeland. Despite being pioneers of Asian female migration to the Heartland, their stories remain largely marginalized in Kansas's migration history.

This project aims to increase the visibility of these women's experiences through digital storytelling and the preparation of a manuscript for publication. Working with a collection of approximately 20 primary interviews conducted in Japanese, we will document their life experiences in the post war Japan and their subsequent lives in Kansas. The primary tasks for Emerging Scholars include reconstructing Japanese interview transcripts in Microsoft Word, translating these into English using translation tools, organizing narratives for a storytelling website and manuscript, and conducting preliminary library research to provide historical context for the primary sources.

Potential Job Tasks and Responsibilities:

- Transcription & Digitization: Converting hard-copy interview notes and transcripts into organized digital format
- Translation & Data Analysis: Using translation tools to convert Japanese interviews into English, followed by proofreading and organizing the data for clarity and impact
- Digital Storytelling: Assisting in the design and editing of content for an existing ArcGIS StoryMaps platform.
- Library Research: Conducting secondary research to provide essential historical context for the primary oral history sources

Student Qualifications & Characteristics:

- Personal Interest: A strong interest in Asian American experiences, postwar Japan, interracial marriage, or migration history
- Professionalism: Highly organized with strong attention to detail, open communication skills, and proactive willingness to learn new technical skill sets.
- Technical Skills: A willingness to complete training/tutorial for ArcGIS StoryMaps is required.
- Language Skills: No Japanese language skills required but previous course work in Japanese language is preferred.

Position #26: Research Assistant/Global Citizenship Project

Mentor Name: Sheyda Jahanbani

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: The term "global citizen" has become commonplace in our time; it appears everywhere from the pages of "Rolling Stone" Magazine to the lists of academic requirements for many university curricula (including our own KU University Honors Program!). But what does this term really mean? I'm writing a book that approaches this question by tracing the concept of global citizenship across time and space, contextualizing the lived experiences of men and women from a variety of walks of life who all found meaning and forged identities through that term. This project, part of a broader effort to better understand the concept of the "global" itself, shows that "global citizen" became a meaningful way of understanding identity in the middle of the twentieth century, when a generation of men and women who

had felt the ravages of world war firsthand sought to transcend the narrow confines of nationalism and build a new basis for international community and humanitarian exchange.

Potential Job Tasks & Responsibility: The student assistant would help me find and review relevant collections of archival material (documents from the past) to find examples of individuals who sought to make "world citizenship" a reality. The next phase of the research will require the student to assist in searching and reviewing newspapers and magazines from the years between 1945 and 1980. Finally, the student may help me unearth visual materials such as newsreels, films, and interviews and review those for relevant evidence of "global citizenship."

Student Qualifications & Characteristics: The student should be interested in the history of peace, humanitarianism, and global politics. They should have basic computer skills. My schedule is flexible so I can work with the students to find a time that would be congenial for them to do the work.

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NATURAL SCIENCES

Position #4: Planetary Simulants Lab Assistant (Cross-listed in Arts)

Mentor Name: Steve Gurysh

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: The Planetary Simulants Lab is seeking an emerging scholar who will work directly with Associate Professor Steve Gurysh from the Department of Visual Art during his Keeler Intra-University Professorship collaborating with Dr. Benjamin Sikes in the Department of Ecology and Evolutionary Biology. This research project in the arts and sciences will explore materials known as "planetary simulants" which describe a class of Earth-based minerals (dust, rock, soil) that are designed to mimic the physical, chemical, and geotechnical properties of other planets and moons. The goal of the Planetary Simulants Lab is to understand how simulant materials can be devised and manufactured, exploring how simulants can be used as a material in art, architecture and design, as media for biological life, as well as how they might be useful to think about the complexities of exchange with other planets.

Potential Job Tasks and Responsibilities: Emerging scholars in the Planetary Simulants Lab will assist with hands-on and scholarly research ranging from:

- Helping generate a directory of global manufacturers that produce a variety of research-grade simulants such as Mars Global Simulant, Lunar Regolith Simulant, etc.
- Conducting internet or database research to identify major researchers, papers, and themes related to simulants and their applications.
- Assisting mentors with learning how to use specialized equipment, working in arts-based fabrication labs in the Visual Art Department in Chalmers Hall to conduct material testing, such as firing simulants at different temperatures in kilns to explore their ceramic properties, or combining simulants with different binders, resins, waste materials, and biosolids to test their applications as a building material.
- Accompanying mentors to lab visits across KU campus, such as the Sikes Microbial Lab in Higuchi Hall, to develop samples that combine these simulant materials with biological media. - Photographing and documenting material samples, fabrication methods, process, and results of their applications.

Student Qualifications & Characteristics:

Must be available for a minimum of 4 hours per week, which includes one 3 hour block of in-person work and at least 1 hour of asynchronous independent research per week.

- Students should be curious, reliable, organized, detail-oriented, willing to learn, and independent in managing their time. The ideal candidate should have an interest and enthusiasm for arts and science research which includes:
- Either experience or interest to learn about processes in Sculptural and Ceramic fabrication while demonstrating an eagerness to learn best practices, demonstrate an attention to detail, and ability to follow proper safety protocols when working with lab equipment and materials.
- Either experience or the interest to learn about research in biological, material, and planetary science, since we will be working with materials that have broad applications in understanding the geochemistry of other planets.
- Students are encouraged to enroll in either a Sculpture, Ceramics-related course

Position #27: Laboratory Research Assistant

Mentor Name: Lynn Hancock

Job Location: This would be an in-person position. **# of Positions: 1**

Project Description: The Hancock Laboratory studies the opportunistic pathogen Enterococcus faecalis. Nearly all land animals, including humans, harbor enterococci in their digestive tract. In healthcare settings, particularly intensive care units, enterococci are able to transition to a pathogenic state when introduced into extraintestinal sites, they are leading causes of catheter-associated urinary tract infections, bloodstream infections, and surgical site infections. The growing emergence of antibiotic-resistance exacerbates the challenge of treating patients with an enterococcal infection. The laboratory investigates how enterococci establish infection and we study cell-cell communication in the context of biofilm formation. We are also interested in identifying bacterial factors that assist in nutrient acquisition during infection.

Potential Job Tasks & Responsibilities: We are looking for a student with an interest in Microbiology, Molecular Biology or Biochemistry. As the scholar joins our research team they will initially assist with general lab duties and maintenance, including preparing growth media for growing bacteria in the laboratory, making chemicals used by laboratory scientists and assisting with a variety of ongoing projects in the lab. Lab maintenance involves washing glassware (loading and unloading dishwasher), restocking disposable consumables, handling lab waste disposal by autoclaving and assisting senior laboratory personnel in day to day operations. As the scholar develops proficiency in performing routine laboratory duties, they will transition to an independent research project.

Student Qualifications & Characteristics:

1) Desire to learn about the scientific enterprise;
2) Highly dependable and willingness to commit to a consistent work schedule (ideally, we are looking for a student that can commit to a minimum of 2 hour blocks on workdays);
3) Ability to receive and follow instructions from senior laboratory members;
4) Be a contributing member of an interactive team of laboratory scientists.

Position #28: Monarch Butterfly Responses to Environment Conditions

Mentor Name: Kristen Baum

Location: In-Person Only **# of Positions:** 2

Project Description: Monarch butterflies make a long-distance fall migration from the northern US and southern Canada to overwintering sites in central Mexico, with the same individuals returning to the southern US the following spring. Monarchs are also host plant specialists and require milkweed as food for caterpillars. This research will evaluate the effects of temperature fluctuations and other environmental factors on larval development and adult lifespan. The results will inform conservation actions for monarch butterflies.

Potential Job Tasks and Responsibilities: The student will assist with research projects in the lab, including working with monarch caterpillars and adult butterflies. There will be the opportunity to participate in other activities related to Monarch Watch depending on student interest. Monarch Watch is

an international organization based at KU that leads education, conservation, and research programs focused on the monarch butterfly, its habitat, and its spectacular fall migration.

Student Qualifications & Characteristics: No prior knowledge or experience is required. The student will receive training for all lab activities and research protocols. The student should be interested in insects, including working with and handling monarch caterpillars and butterflies. The student should be available to come in 2 or 3 days a week for a minimum time block of 2-3 hours each day and willing to commit to a consistent weekly schedule. The student should be curious, organized, and detail-oriented

Position #29: Laboratory Research Assistant

Mentor Name: Paulyn Cartwright

Job Location: This would be an in-person position **# of Positions: 1**

Project Description: The Cartwright Lab investigates the evolution and development of jellyfish and their relatives. We culture several species in our lab and use molecular methods to look at genes that regulate their development and life cycle transitions. The position is for a student to assist with general lab duties including helping to take care of the animals and observe their development under different experimental conditions. The student will develop skills in caring for marine invertebrates and basic molecular lab techniques that will prepare them for conducting independent research.

Potential Job Tasks & Responsibilities: The student would be responsible for making artificial sea water, setting up the food culture (brine shrimp), feeding the animals, washing the animal culture glassware and caring for the different species of marine invertebrates. Depending on the students engagement and interest, the student can gradually take on more responsibilities, including helping the graduate students with their experiments in molecular and developmental biology.

Student Qualifications & Characteristics: Students would be required to come in 3X/week (preferably MWF) for approximately two hours each time. The most successful students are those that love marine invertebrates, spend the time to observe their growth and overall health (paying attention to detail) and can reliably keep up the feeding schedule.

Position #30: Husbandry of a Little Frog with a Huge Genome (Xenopus Longipes)

Mentor Name: Coral Zhou

Location: In-person Only **# of Positions: 1**

Project Description: The African clawed frog Xenopus longipes is extremely special because it has an enormous genome that contains 3 times more DNA compared to a human genome. The Zhou Lab is interested in understanding how these frogs have adapted to have such a big genome. Xenopus longipes is also special because they are an endangered species, as they only live in a single lake in Cameroon, Africa. We have recently developed methods to raise these frogs in the lab. The student who takes on this project will care for Xenopus longipes embryos and raise through the tadpole stage and into adulthood.

Potential Job Tasks & Responsibility: The student will raise Xenopus longipes embryos from early embryos into adulthood. The tasks will include monitoring embryo growth, cleaning and feeding on a daily basis.

Student Qualifications & Characteristics: The student must be conscientious and disciplined about their animal care responsibilities. The students will check in with Dr. Zhou every Monday to plan out their shifts

for the week. Each shift will include 30 minutes of active work, approximately 10 times a week. Dr. Zhou will train the student in how to care for the animals, and once trained, the student will be responsible for performing these tasks on their own, while logging their progress using an online system.

Position #31: Health Neuroscience: Understanding the Brain to Understand Health Behaviors

Mentor Name: Laura Martin

Location: Remote Only **# of Positions: 1-2**

Project Description: The research focuses on understanding the relationships between brain function and health behaviors (e.g., exercise, eating, smoking, vaping). The primary project will include helping with recruitment, data management, and data quality for a study examining ways to increase physical activity among mid-life adults. In addition, the student may work with existing brain and behavior data from previous studies examining eating behaviors, smoking, and vaping.

Potential Job Tasks & Responsibilities: Activities include searching for and reviewing existing scientific papers, learning functional magnetic resonance imaging (fMRI) analysis methods, contacting potential participants to enroll in a research study. All activities can be done remotely. If the student is available to come to the KUMC campus there may also be opportunities to observe and assist with MRI data collection (this is not required). In addition, the student is encouraged to join lab meetings if times work with the student's schedule.

Student Qualifications & Characteristics: Requirements include meeting weekly (scheduled based on availability), ability to work independently and remotely.

Position #32: Diet, stress, and gene expression

Mentor Name: Lisa Timmons

Job Location: The job requires the student to work in-person only. **# of Positions: 1-2**

Project Description: How genes are expressed and how DNA and chromosomes are protected from enviro nmental assault are ongoing research interests of the lab. We are also interested in how essential dietary components are involved in regulating gene expression. The laboratory utilizes the organism Caenorhabditi slegans as a vehicle of discovery because we are able to study trafficking of molecules derived from the diet, from cell-to-cell and organ-to-organ. Students may assist in a # of ongoing projects, some examples include genetic analysis of RNAi mechanisms, protein over-expression and biochemical assay development, or cell biological analysis of protein localization and function.

Potential Job Tasks & Responsibilities: The student's interests and schedule will help determine the nature of the experiments performed and the level of independence of the student. An Emerging Scholar might perform experiments involving genetic crosses, tests for the effects of dietary components (vitamins, iron) on gene expression, biochemical purification, and assays of protein function, or may be involved in genetic screens. The Emerging Scholar might assist more experienced lab members with experiments, or with additional training and oversight, may perform their own hypothesis-driven experiments.

Student Qualifications & Characteristics:
Previous experience is not required as students will receive extensive on-the-job training. We can accommodate students who lack advanced courses in biology and may not be able to comprehend our research goals at the outset. A successful student will be responsible, careful, dependable, communicative, will learn quickly, and will get along well with the rest of the group. The work s chedule can be flexible; however, at the outset, the student will not be allowed to work alone; work hours must coincide with those of other lab members.

Additional Comments: We have mentored freshmen and work study students, including non-biologists, and can mentor students with programming expertise.

Position #33: Animal Social Behavior

Mentor Name: Jenny Gleason

Location: In-Person Only **# of Positions:** 3

Project Description: When animals encounter each other, social interactions results. Such interactions include courtship behavior, when males attempt to entice females into mating with them, and aggression between members of the same sex fighting over resources. Emerging Scholars and other undergraduates in the lab have started to piece together the behavior of a species of fruit fly that is very different from the behavior in other species. For example, in studying male remating behavior, we observed that females fight. We are now examining the conditions that induce fighting. The results will have implications for both the evolution of the species and control of this species, which is an agricultural pest.

Potential Job Tasks and Responsibilities
The student will maintain cultures of the flies, sort flies for experiments, and perform experiments. All experiments will involve manipulation of the flies or environmental variables. The student will be completely trained by the advisor; thus no prior experience is needed. As the student becomes familiar with the flies and how they behave, there will be opportunities for the student to develop new hypotheses and then design and execute the experiments to test the hypotheses. In addition to specific experiments, the student will be expected to contribute to basic lab maintenance (such as making fly food) as all lab members are required to do.

Student Qualifications & Characteristics
The ideal student for this project is excited to learn about evolutionary biology and animal behavior. The student will need to have a set schedule each week, though the exact schedule is flexible. The student must be available during regular working hours for at least three two-hour blocks a week, but fewer, longer blocks are good as well. Attention to detail, organizational skills, and a willingness to ask questions will all contribute to student success. The experiments are not technically difficult but may require some trouble shooting to be executed properly. The student will need to be persistent and not easily discouraged.

Position #34: Computational modeling of peptide modulators of the Blood-Brain Barrier

Mentor Name: Krzysztof Kuczera

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project Description: The project is aimed at discovering and optimizing novel molecules that will temporarily disrupt intercellular adhesion of cells in the blood vessels of the central nervous system, allowing for delivery of diagnostic and therapeutic agents from bloodstream to brain. Specifically, we will

develop peptides and analogs that will bind to cadherin proteins, which are part of the intercellular junctions between cells in blood vessels. In the long term, this will help cure neurodegenerative diseases, like Alzheimer's. The student's work will involve initial computational screening of large sets of initial candidate molecules and later optimization of properties. The top candidates will then be evaluated experimentally.

Potential Job Tasks and Responsibilities: The student will be provided with data sets of initial peptides and/or analogs for screening. The first step will be to perform computational predictions of the interactions of the molecules with cadherins - where and how strongly they bind. The next step will be to attempt modifications of the starting structures to optimize performance. After that will come computational evaluation of pharmacological properties, such as solubility and toxicity. The student's work will involve use of web servers and local software to analyze interactions between peptides and cadherins. This will include use of tools like molecular graphics and docking.

Student Qualifications & Characteristics

- Availability for 1-3 hour blocks several times a week
- Carefully organize the data inputs and outputs
- Present regular reports
- Interests in one or more of these areas: biochemistry, computer science, medicine

Position #35: Interface Engineering of Two-Dimensional Quantum Materials

Mentor Name: Qunfei Zhou

Location: Hybrid: In-Person and Remote **# of Positions: 1-2**

Project Description: We are looking for motivated undergraduate students to explore the interface and tunability of two-dimensional (2D) materials through computational and machine learning approaches. The goal of this project is to use computational tools and develop physics-based models to uncover emergent properties in 2D van der Waals materials, with applications in next-generation electronics and quantum technologies.

Potential Job Tasks & Responsibility: The student(s) will gain hands-on experience in simulating materials structure and their electronic properties using state-of-the-art computational techniques. This includes extending concepts from undergraduate physics to advanced modeling frameworks. The student(s) will use and optimize Python scripts, Bash workflows, run simulations on remote supercomputers, and contribute to data analysis.

Student Qualifications & Characteristics: We are seeking students who are self-motivated and interested in programming, physics, chemistry, and scientific research.

Position #36: Micrometeorites

Mentor Name: Jennifer Maggie Delgado

Location: Hybrid: In-Person and Remote **# of Positions:** 2

Project Description: Millions of kilograms of tiny meteorites fall to the Earth every year. We want to build a collection of micrometeorites for study by scooping up dirt from rooftops and sorting out the terrestrial material. Students will help with the collection and sorting of the material, and with identification of possible micrometeorites.

Potential Job Tasks and Responsibilities: Possible duties include; Using google maps to find possible collection sites. Calculating theoretical yields based on roof size. Helping to collecting material from rooftops. Determining the mass of the collected material. Cleaning the material and removing organic matter. Sorting material based on size and magnetic properties. Using a microscope to identify possible micrometeorites. Cataloguing finds.

Student Qualifications & Characteristics

- Should have a strong interest in astronomy, space, physics or geology.
- Must be willing to wear personal protective equipment during the handling of uncleaned rooftop material.
- Must be willing to deal with unpleasant rooftop material.
- Likes "find the thing" games like "Where's Waldo" since searching for these small particles can be a bit like those.

Position #37: Drosophila maintenance assistant

Mentor Name: Justin Blumenstiel

Location: In-Person Only **# of Positions: 1**

Project Description: This is a two part position. You will assist in maintaining stocks of Drosophila melanogaster. This entails flipping stocks on alternating weeks and helping with cooking Drosophila media. In addition, the student will assist in Drosophila genetics. This entails setting up crosses between different strains and observing the outcome.

Potential Job Tasks and Responsibilities: Position can be up to 10 hours per week. Student responsibilities are: Maintaining Drosophila stocks by transferring progeny to new Drosophila vials every other week. Cooking fly food in a large steam kettle once every three weeks. Setting up crosses and performing genetics experiments with different Drosophila stocks.

Student Qualifications & Characteristics:

- Must have a strong work ethic and be reliable, as demonstrated by previous work experience.
- Preference is for students planning on being an EEOB major with an interest in evolution.

Position #38: The molecular sequence and evolution of a novel telomere regulating gene

Mentor Name: Jae Young Choi

Location: In-Person Only **# of Positions: 2**

Project Description: Telomeres are crucial genetic structures that protect ends of chromosome from damage and erosion. It is so important that all multicellular organisms have telomeres. Naturally, genes that maintain the telomere are highly conserved, found in both animals and plants, and these genes do not show any signs of increased evolutionary change. However, my lab has discovered an exception to this rule and discovered a potentially novel telomere maintenance gene that has in recent evolutionary time arose in the Monkeyflower (Mimulus guttatus). The student hired for this project will be tasked with sequencing this novel telomere gene and depending on the progress study the genes' evolutionary history.

Potential Job Tasks and Responsibilities:

This is a molecular biology project. The hired student will learn and conduct:

- basic molecular biology techniques (i.e. pipetting),
- grow and maintain plants,
- extracting DNA from plant samples,
- with progress conduct molecular biology experiments (PCR and gel electrophoresis).
- The student will also be expected to conduct preparations for basic lab work (i.e. making solutions, autoclaving, etc.

Student Qualifications & Characteristics: Student does not need any prior experience in molecular biology, and this can be taught to the student. However, a basic knowledge of genetics, DNA, and molecular biology (i.e. High school level advanced biology) will be required. Prior experience in plant biology is not necessary, however any plant experience or interest in plant biology will be highly favored. Student must also be ok with getting their hands "dirty". We will be working in the greenhouse working with soil to grow plants. Then bring them back in the lab and use chemicals and reagents to conduct experiments. Attending weekly lab meeting (hour and half max) is required. Student must be available for at least three 2 hour blocks of time a week. The student must have attention to detail and be organized

Position #39: Laboratory Research Assistant

Mentor Name: Scott Hefty

Location: In-Person Only **# of Positions: 2**

Project Description: The Hefty Laboratory (http://hefty-lab.com) investigates the obligate intracellular bacteria, Chlamydia trachomatis. Infections by these bacteria inflict an immense impact on public health as the most common cause of preventable blindness worldwide and sexually transmitted bacterial infections. Despite this immense public health impact, there is much about the basic biology and pathogenesis that is poorly understood. The Hefty Lab incorporated aspects of Microbiology, Biochemistry, and Cell Biology to gain a better understanding of this unique and critical bacteria. The position is for a student to assist with general lab duties and activities in the Hefty laboratory. In learning and assisting in these activities, it is expected the student will develop essential skill sets that will enable their transition into an independent research project. It is also expected that they will also learn about the scientific

projects that are ongoing in the Hefty laboratory so that the student can consider their primary project and interest!

Potential Job Tasks and Responsibilities:
The position would help support general lab activities:

- Glassware "“ Clean appropriately (automated dishwasher for most items) and place back on shelves
- Buffers "“ Replenish when necessary.
- Waste "“ Autoclave biohazard, place in black garbage bags, take to outside dumpster.
- Reagent area "“ Clean as needed (wipe off balances, replace bench paper, etc.).
- Pipette tips "“ Refill boxes, autoclave, and stack on shelves.
- Packing material removal - Breakdown cardboard boxes and take to recycling and remove insulation boxes (Biostore will take most).
- General autoclaving "“ autoclave glassware and/or reagents as needed.
- Bacterial media/plates "“ as needed, make LB broth and agar plates.
- Electrophoresis gels "“ as needed, make agarose and acrylamide gels.

Student Qualifications & Characteristics:

- Great work ethic,
- desire to learn research techniques and activities,
- interest in molecular biology and/or microbiology, and
- considerate and constructive interactions within a team/group setting.

Position #40: Computer simulations of catalytic reaction mechanism on silicate support

Mentor Name: Marco Caricato
Location: In-Person Only **# of Positions:** 2
Project Description: Silica-based materials are widely employed as catalysts in a broad range of chemical reactions. However, it is difficult to optimize the reaction conditions based only on experimental work. Computational simulations of reaction mechanisms can provide fundamental insights about how the reaction happens, which can be used to help experimentalists to create more efficient or more selective catalysts. In this project, our group is studying the effect of combining two different metals to perform a specific reaction: the olefin metathesis to produce propylene, a key chemicals with many applications. The Emerging Scholar involved in this project will conduct quantum mechanical simulations of models of the catalytic sites to determine reaction energies and reaction barriers. They will analyze the data and use machine learning methods to understand what structural or electronic descriptors best correlate with the reaction barriers. They will work in collaboration with a graduate student in the group, who will help them to perform the simulations and analyze the data. More specifically, the Emerging Scholar will work on a subset of the systems that we are considering, and they will directly contribute to the overall research effort to study these catalytic materials.

Potential Job Tasks and Responsibilities: After learning the basics on how to perform quantum chemistry simulations, the student will independently perform the simulations on the systems of interest, and will perform the data analysis of the energy to calculate reaction energies and reaction barriers. A basic

understanding of how a chemical reaction occurs is required, but the skills for performing the simulations will be learned progressively as the project proceeds. Although these simulations are based on molecular quantum mechanics, a theoretical knowledge of physical chemistry is not required: we will teach the student what they need to perform the simulations successfully and to interpret their output. The student will also learn to use Linux-based computer systems and how to submit jobs on a high-performance computing cluster. From prior experience with working with undergraduates, a time commitment of at least 5-7 hours a week.

Student Qualifications & Characteristics: Because the research is computational in nature, no particular safety issues arise. However, attention to details and organization are fundamental when working with simulations, otherwise it is easy to mishandle the data. The student should be able to dedicate at least two consecutive hours to the project for a total of 5-7 hours a week (longer time block are better). The student needs to be interested in working with computers, and an inclination for puzzle-solving is beneficial for this type of research.

Position #41: Modeling Chemical Reactions

Mentor Name: Ward Thompson

Location: In-Person Only **# of Positions:** 2

Project Description: The Thompson Research Group (https://thompsongroup.ku.edu) is seeking an undergraduate student with an interest in learning how to use computer simulations to aid the interpretation of chemical experiments of scientific and environmental importance. Prior research experience with computer simulations is not required, as all technical knowledge needed to successfully execute the assigned tasks will be gained through active collaboration with postdoctoral and graduate researchers in the group. Interested students are not expected to have an advanced understanding of chemical reactions. Instead, a good match for the position will be a student that is detail oriented, scientifically curious, and interested in addressing questions that intertwine environmental chemistry, physics, and computer science. Broadly speaking, the project will gradually expose students to the setup, execution, and analysis of computer simulations for the reduction of organic and inorganic compounds by the hydrated electron, a peculiar chemical species used in advanced water treatment procedures to break down highly toxic and persistent chemicals in water.

Potential Job Tasks and Responsibilities: This work will involve collaborating with postdoctoral and graduate student researchers on modeling of chemical reactions. The student will become familiarized with how to access and use the high-performance computing cluster, be taught the basic principles for building a computational model of a chemical reaction, learn how to create input files defining such models for existing computer programs, execute these calculations, and learn how to interpret and analyze the results including making plots and schematic graphics.

Student Qualifications & Characteristics: This project is well-suited for a student who is self-motivated and has interest in chemistry, physics, or computer science. Some experience with chemistry, e.g., enrollment in general chemistry, would be helpful, but is not essential.

Position #42: Expression and Purification of Recombinant Proteins

Mentor Name: Roberto De Guzman

Location: In-Person Only **# of Positions: 1**

Project Description: Expression and Purification of Recombinant Proteins This position requires a Biochemistry major. Student will learn all the methods required to express and purify recombinant proteins in bacteria. These proteins are used by bacteria or viruses to cause infectious diseases in humans. The purified proteins are used further in other experiments to understand basic biological mechanisms of how they work. Student will learn growing bacterial cultures, harvesting cells, and using laboratory equipment used in protein purification.

Potential Job Tasks and Responsibilities: Running protein gels, including making protein gels, running gels, staining, and documentation of results. Growing E. coli cells, monitoring their growth. Inducing protein expression. Harvesting cells. Resuspending cells for protein purification. Learning how to use AKTA chromatography system to purify proteins. Learning documentation of results for presentation.

Student Qualifications & Characteristics: Must be a biochemistry major. Must have 2 consecutive days of presence in the lab (meaning, if student plan to be in the lab on Tue, student should be in the lab on Wed as well. There should be one lab day that span 4 hours. The second lab day can be 2 hours.
he overall goal of the project is to generate long-term (many millions of years) records of carbon isotopes. These records help identify significant perturbations to the carbon cycle throughout Earth history. The primary job tasks will be to weigh out small rock powder samples into vessels. The student will

Position #43: Stable Isotope Sample Preparation for Carbon Isotope Stratigraphy

Mentor Name: Marina Suarez

Location: In-Person Only **# of Positions: 1**

Project Description: also help with lab chores such as cleaning glassware. The student will have an opportunity to develop a project of their own.

Potential Job Tasks and Responsibilities

- The student will be responsible for weighing samples. Steps for this task includes:
- Communicating with lab staff
- Receiving information about what samples need to be weighed
- Cleaning weighing area Weighing samples with a microbalance
- Recording masses
- Marking off what samples have been weighed
- Cleaning glassware includes rinsing with water Soaking glassware in phosphoric acid baths
- Rinsing glassware with DI water
- Placing glassware in ovens to dry Re-capping vials and returning cleaned glassware to storage

Student Qualifications & Characteristics: Students should be able spend at least 2 hours at a time in the lab and be consistent in their schedule. We hope for a student that can work at least 4-7 hours a week. Student should be able to pay attention to detail, take meticulous notes, be organized, and work well with others. An interest in Earth Sciences or chemistry is helpful but not necessary.

Position #44: An Isotopic Survey of Kansas Water Resources

Mentor Name: Mohammed Elshenawy

Location: Hybrid: In-Person and Remote **# of Positions:** 2

Project Description: The state of Kansas is currently navigating a multifaceted water security crisis characterized by the bifurcated challenges of groundwater exhaustion and surface water impairment. In the western reaches of the state, the High Plains Aquifer is experiencing precipitous depletion due to intensive agricultural extraction, with many areas approaching a critical minimum threshold that threatens long-term irrigation viability. Conversely, the eastern region faces systemic storage losses within its surface reservoir network as accelerated sedimentation reduces hydrologic capacity and compromises municipal supply reliability. These convergent pressures necessitate a comprehensive reevaluation of Kansan water resources to mitigate the projected socioeconomic consequences of regional water scarcity.

The application of stable isotope geochemistry, specifically the analysis of oxygen-18 (δ18O) and deuterium (δ2H), provides a robust diagnostic tool to characterize and quantify the sources, recharge rates, and transport mechanisms of water resources across the Kansas landscape. For example, isotopic signatures (δ18O and δ2H) can serve as conservative tracers to determine the age of groundwater. By comparing the isotopic composition of deep aquifer samples to modern Local Meteoric Water Lines (LMWL), we can assess whether current irrigation withdrawals are being replenished by modern rainfall or if the state is "mining" finite prehistoric resources. This data is critical for establishing realistic sustainable yield limits.

Potential Job Tasks and Responsibilities:

- You will be trained to master different stable isotope techniques to analyze surface/ground-water samples in laboratory
- You will be trained to participate in field work to collect ground/surface water samples.
- You will be trained to archive, interpret and present their collected data in different formats (e.g., map, report and presentation).

Student Qualifications & Characteristics:

- If you are driven to solve national challenges through science, we want your input!
- We are looking for detail-oriented, organized individuals who can commit at least four hours a week to this project.
- You'll also meet weekly with a mentor to collaborate and share insights.

Position #45: Flowering plant evolution, genetics and development

Mentor Name: Lena Hileman

Location: In-Person Only **# of Positions:** 1

Project Description: The amazing diversity in flower shape and color that we see in the natural world is largely the result of interactions between flowers and pollinators. In this project, we are studying how complex hummingbird-adapted flowers evolve from equally complex bee-adapted flowers. Evolution of hummingbird-adapted flowers requires many changes to flower shape, color, and nectar reward. In the long-term, our goal is to understand the genes that are important for differences in flower form and function when species are adapted to different pollinators. Emerging Scholars on this project will help with plant care and data collection. See the next section for what both plant care and data collection might include.

Potential Job Tasks and Responsibilities: In the 2026-2027 academic year, an emerging scholar student will start with plant care and propagation in the greenhouse in Haworth Hall. They will help to maintain our research plant collection. After plant care tasks become routine, they will be trained on basic flower trait analysis, primarily in the coming year this will include learning to use the open-source software package, ImageJ to take and record measurements of flower traits. ImageJ is distributed by the National Institutes of Health and widely used for biological image analysis. For students who show an interest in continuing in the lab, there are opportunities to work on projects that will help them develop skills in molecular genetics and genomics.

Student Qualifications & Characteristics: The ideal student for this project is excited to learn about flowering plant diversity, evolutionary biology and genetics. They will need to have a set schedule with availability during regular working hours, though the exact schedule is flexible. The ideal student will be organized and detail oriented. They are also expected to have good communication skills, especially a very strong willingness to ask questions and seek clarification to ensure that tasks are carried out correctly.

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SOCIAL SCIENCES

Position #46: Power of Music (PROMUS) Laboratory Undergraduate Research Assistant
Mentor Name: **Rebecca Lepping**
Location: Remote Only **# of Positions**: **2**

Project Description: In the PROMUS Lab, we study affective neuroscience, how music, emotion and decision-making intersect. We study how music is represented in the brain and how that is affected by mood disorders, fibromyalgia and pain, Alzheimer's disease and other chronic conditions. Research in the PROMUS Lab uses tools from affective neuroscience, including brain imaging, to understand why people engage with music and how they use music to regulate their mood, experience of pain and other psychological and physiological symptoms.

Our research examines the links between:

- music and lung health,
- music and pain,
- music and emotion,
- music and Alzheimer's disease and
- the interaction of kidney and brain health with a body/mind/brain approach.

Your work as an undergraduate research assistant would be to help with data collection, data entry, data analysis, and data management for the project.

Potential Job Tasks & Responsibilities:

- data entry, transferring information accurately into computer-based forms and Excel
- spreadsheets
- data management, organizing new data into proper folders, making sure data file names are correct, making sure data are complete
- data analysis, viewing imaging data, checking for good data quality, running analysis scripts
- documentation, keeping detailed and accurate notes about the tasks you complete,
- summarizing methods and results, helping with reports and manuscripts, making tables and
- figures
- attending regular lab meetings
- project progress meetings with the supervisor

Student Qualifications & Characteristics:

We're looking for someone who is interested in the brain and how it works, or someone who is interested in computer-based image analysis. You don't have to be a science major to qualify. You will be great for this position if you have good attention to detail and like to work on your own. It's best if you like working with numbers, computers, and learning new software. Don't worry if you haven't done anything like this before. We can teach you everything you need to know. But if you really don't like working with computers, this might not be the right position for you. You will need to be able to work remotely. If you have access to a computer, we can help you set that up. We will have weekly virtual meetings to talk about the progress you are making on the project, plan for the next week's tasks, and to troubleshoot any problems that come up. We can schedule these to fit into your class schedule, but you should expect to meet every week. The rest of your hours will be on your own, although I will be available if questions come up. We will come up with a schedule together for when you will complete the rest of your hours to make time management easier.

Position #47: Speech and Language Development in Children

Mentor Name: Margarethe McDonald

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: We have 2 projects examining the speech and language development of children between ages 3-9 years old. One looks at how children who only speak English learn to hear the difference between difficult sounds in a new language. The other looks at how bilingual children (Korean English, Mandarin-English, and German English) produce words and sounds in both of their languages. Both projects use eye-tracking and voice recording tasks with the kids. Student researchers can support the testing of children and coding of data. Students do not need to speak a language other than English, but we welcome students who do have knowledge of other languages as well.

Potential Job Tasks & Responsibility: Tasks will be matched to student interests but could include:

1. Read about how children learn to produce and hear the sounds of their language(s).
2. Attending lab meetings and listening to more advanced students describe their projects.
3. Create flyers and other science outreach material (the content will be provided, but creativity in making things attractive to the public eye is ideal!)
4. Transcribe recordings of child speech. This would include typing what the child says in English, or another language the student knows.
5. Check data quality (e.g., organize spreadsheets, audio files, and check for errors).
6. Observe and help more advanced students test child participants. This includes learning how to run an eye-tracker, learning how standardized speech and language tests are administered, and learning how parental interviews are conducted.

Student Qualifications & Characteristics:

1. Consistency with agreed-upon meeting times.
2. Though not required, there are specific tasks that would be ideal for students with an eye for graphic design, and those that are good at detecting minor errors in patterns (e.g., in text or in visualization)
3. Interest in bilingualism, speech language pathology, child development, computer science, web design, and machine learning, among others, will make work enjoyable!
4. Knowledge of a language other than English is not required but always a plus.

Position #48: Sociolinguistics Research on Kansas Speech

Mentor Name: Lacey Wade

Location: Hybrid: In-Person and Remote **# of Positions: 3-4**

Project Description: What does Kansas speech sound like? Did you know that Kansans have an accent? In fact, Kansas speech has a lot of overlap with California speech--but there are also things that distinguish it from other regions! The Sociolinguistics Lab at KU records interviews with Kansas speakers and acoustically analyzes them to determine how pronunciation differs across regions, social groups, and time. Language is changing in Kansas, and we get to observe it happening right before our own eyes!

We also use data from behavioral experiments to understand how Kansans perceive both local and non-local linguistic features. For instance, did you know that many Kansans pronounce PIN and PEN identically? BULL and BOWL are also commonly pronounced the same in the area. Can Kansans perceive the difference

between these words when spoken by someone who pronounces them distinctly? Why is this easier to do for some speakers or some words compared to others?

Students working on this project will be trained to work with interview data and assist with the acoustic analysis process (this involves measuring the precise properties of speech sounds using computer software!) Interested students also have the option of being involved in interviewing participants. We are constantly developing new perception experiments to understand what people think about Kansas speech, and students involved with the project will have the opportunity to contribute to experimental design at all stages!

Potential Job Tasks & Responsibility: Students will:

- Transcribe recorded interviews
- Make note of interesting linguistic observations in the interviews they transcribe
- Run research subjects on (computer-based) perception experiments
- Contribute to the design of new perception experiments, including editing sound files and piloting experiments before they are used with research subjects
- Aid in recruiting and scheduling new participants
- Participate in lab meetings with the other undergraduate, graduate, and faculty researchers working in the Sociolinguistics Lab

Students might also aid in the following tasks, depending on their interests and experience:

- Interview new participants for our study
- Aid in acoustic analysis and data preparation/analysis
- Contribute to the design of new perception experiments, including coding experiments on various platforms and developing methodology for new experiments

Student Qualifications & Characteristics: Students interested in the position should demonstrate the following:

- Curiosity about language, including how it varies across regions, how it is changing over time, and how it is used in social contexts
- Excellent written and oral communication skills
- The ability to problem-solve
- Great organizational skills and attention to detail

Working hours are flexible and can involve a combination of in-person and remote work.

Position #49: Research Assistant, Integrative Learning Laboratory

Mentor Name: Jonathan Pinkston

Location: In-Person Only **# of Positions: 2**

Project Description: The Integrative Learning Laboratory offers highly motivated students the opportunity to work on projects in comparative cognition and learning. Our work focuses on identifying commonalities and differences between humans and animals from a learning science perspective. Students will learn foundational skills in the handling maintenance of laboratory animals, operation of laboratory equipment in the study of human and non-human learning, and basic data analysis skills. Students will work

collaboratively with other students and graduate students to accomplish ongoing research. The experience will provide a firm foundation for future research in the behavioral, psychological, and neuroscience of learning. Our current projects are:

1. Understanding the psychology of effort and how effortful task requirements produces procrastination and suboptimal decision making.
2. Identifying how the amount of reward affects choice for delayed versus immediate outcomes.

Potential Job Tasks & Responsibility:

- Implement daily health monitoring of laboratory rodents
- Conduct experimental sessions using automated equipment
- Maintain laboratory records
- Perform intake procedures with human participants
- Perform basic data entry and analysis in ongoing studies of learning
- Reliable and dependable, with strong work ethic
- Availability to work in 2-3 shifts per week, 1-2 hours per shift
- Ability to work with others in a team environment
- Comfortable potentially working with animals
- Familiarity or willingness to learn basic data entry with spreadsheets, e.g., Excel

Position #50: Research Assistant

Mentor Name: Logan Knight

Location: Remote Only **# of Positions: 1**

Project Description: We are looking for a reliable and enthusiastic person to work as a research assistant on a qualitative study. The research team will be exploring how survivors recover from organized multi-perpetrator abuse from the viewpoint of survivors and helping professionals in order to develop helpful resources. Additional research studies and topics may arise throughout the year, and students are welcome to propose studies if desired. Research work will include conducting qualitative data analysis, conducting literature reviews, writing research briefs, preparing visuals for disseminating research findings, and so on. While this job is open to students enrolled across different disciplines, students with an interest in social work or psychology and/or qualitative research are particularly encouraged to apply.

Potential Job Tasks & Responsibility:

- Work 4-7 hours per week.
- Research work will include conducting qualitative data analysis, conducting literature reviews, writing research briefs, preparing visuals for disseminating research findings, and so on.
- Complete expected events and trainings run by the Emerging Scholars Program

Student Qualifications & Characteristics:

- Strong writing, reading and communication skills
- The student should be self-directed, pay attention to details and able to prioritize tasks.
- Basic skill of using email, Microsoft Office Suite, as well as web browser applications.
- Willing to learn how to use research software such as Covidence, Dedoose, SPSS, etc.
- While this job is open to students enrolled across different disciplines, students with an interest in social work or psychology and/or qualitative research are particularly encouraged to apply.

Position #51: Undergraduate Student Research Assistant – Center for Research to Transform Systems for Family, Community & Social Justice

Mentor Name: Brennan Miller

Location: Hybrid: In-Person and Remote **# of Positions: 3**

Project Description: The Center for Research to Transform Systems for Family Community & Social Justice (CRTS) is seeking undergraduate(s) to join our research team. The purpose of this position will be to support one or more of our grant-funded projects. These projects involve a wide range of research methodologies, including community-based participatory research, quantitative analysis, qualitative analysis, arts-based research, and courtroom observations. The Undergraduate Student Research Assistant(s) will have the opportunity to learn how to conduct meaningful research focused on improving families' and children's lives.

Potential Job Tasks & Responsibility: Students will have the opportunity to be a contributing member to the CRTS research team, which comprises professors, project managers, and research staff. Tasks will vary across a variety of projects, which include data entry, data analysis, reading and summarizing articles, writing literature reviews, writing report summaries, coding qualitative and quantitative data, assist in qualitative and quantitative data analysis, developing data dashboards, conducting interviews, court observations, attending weekly CRTS meetings, and mentor meetings. Other duties may include clerical tasks, general office duties, proofreading, printing materials, and mailing materials for research projects.

Student Qualifications & Characteristics: Student Qualifications:

- 6 months experience in a position that required attention to detail and strong organizational skills as evidenced by application materials.
- 6 months' experience demonstrating the ability to work both independently and as part of a team as evidenced in application materials.
- At least 1 year of experience using computers and software programs such as Microsoft Office as evidenced in application materials.
- Excellent writing skills as evidenced in application materials.

Preferred Qualifications:

- Lived foster care experience or strong desire and commitment to learn about the child welfare or foster care system
- Academic background or focus on human service-related field, such as social work, psychology, sociology, etc.
- Commitment to the vision and mission of The University of Kansas School of Social Welfare vision and mission (https://socwel.ku.edu/vision-mission)
- Experience in research (e.g., coursework, literature reviews, data entry) or high enthusiasm for learning about research

Position #52: Use of Technology in Healthcare

Mentor Name: Brittany Melton

Location: Hybrid: In-Person and Remote **# of Positions: 1-2**

Project Description: This program involves a set of independent research projects that examine the use of technology in healthcare, such as electronic health records and medication alerts, and how these technologies impact patient care both from a patient and provider perspective, and how healthcare providers approach patient care when using new technologies. A student would be a welcomed study member, assisting in all aspects of research, including data collection/analysis, literature synthesis, and scholarly writing.

Potential Job Tasks & Responsibilities: A student would have a multitude of administrative and scholarly responsibilities that include data collection and chart reviews, data collection and analysis, literature review and synthesis, and development of new grants and publications. The student is not required to have prior experience with any of the listed activities and has the possibility of being included as an author on presentations and publications produced, if interested.

Student Qualifications & Characteristics: The student needs to have Microsoft Office (primarily Word and Excel) and organizational skills, be responsible and accountable with data and equipment, be self-motivated to complete tasks, be detail-oriented, able to work independently when given clear instructions, and able to maintain confidentiality. The student will be required to complete training on ethical conduct of research and protection of patient data upon joining the study team. While unlikely, a trip to the University of Kansas Medical Center is possible. Some exposure to healthcare is desirable but not required. This project would be a good experience for someone interested in or curious about healthcare professions, the role of technology in healthcare, or data management.

Position #53: Redesigning physics courses: how do we improve student learning?

Mentor Name: Sarah Rush

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project Description: Recently there has been a push to redesign courses and the focus has primarily been on the delivery of the curriculum (course content). Students are increasingly being required to take a more active role in their learning. For example, in our introductory physics courses, instead of sitting and watching (or in many cases not watching) a lecture during class, students are required to read or watch videos before class. This allows the class time to be focused on solving problems (typically in a group environment) which is where students tend to struggle the most. Having already redesigned the delivery in many of our introductory courses; this project will focus on how redesigning the curriculum (specifically the reordering of the topics covered in courses) will impact student learning.

Potential Job Tasks & Responsibility:

a. reading relevant articles related to the research (some articles will be provided, and additional articles of interest can be chosen by the scholar)
b. after reading the articles, try and determine what changes have been applied to the ordering of the physics topics

c. determine if the changes have improved the grades, and/or attitudes and if so, how was that measured (pre and posttests, student surveys, grades in courses, etc.)
d. look at and analyze the data that we are collecting and work to find ways to present the data (presentation style might be similar to that found in the research articles)

Student Qualifications & Characteristics: Most important qualifications and characteristics are a willingness to work and a desire to learn! You don't necessarily need to be good at physics or interested in education. That would likely make the job more interesting and fun but is not required and training in the skills required will be provided. There will be a mandatory 1-hour meeting each week.

Position #54: Research Assistant/Global Citizenship Project

Mentor Name: Sheyda Jahanbani

Location: Hybrid: In-Person and Remote **# of Positions:** 2

Project Description: The term "global citizen" has become commonplace in our time; it appears everywhere from the pages of "Rolling Stone" Magazine to the lists of academic requirements for many university curricula (including our own KU University Honors Program!). But what does this term really mean? I'm writing a book that approaches this question by tracing the concept of global citizenship across time and space, contextualizing the lived experiences of men and women from a variety of walks of life who all found meaning and forged identities through that term. This project, part of a broader effort to better understand the concept of the "global" itself, shows that "global citizen" became a meaningful way of understanding identity in the middle of the twentieth century, when a generation of men and women who had felt the ravages of world war firsthand sought to transcend the narrow confines of nationalism and build a new basis for international community and humanitarian exchange.

Potential Job Tasks & Responsibility: The student assistant would help me find and review relevant collections of archival material (documents from the past) to find examples of individuals who sought to make "world citizenship" a reality. The next phase of the research will require the student to assist in searching and reviewing newspapers and magazines from the years between 1945 and 1980. Finally, the student may help me unearth visual materials such as newsreels, films, and interviews and review those for relevant evidence of "global citizenship."

Student Qualifications & Characteristics: The student should be interested in the history of peace, humanitarianism, and global politics. They should have basic computer skills. My schedule is flexible so I can work with the students to find a time that would be congenial for them to do the work.

Position #55: Baby-Music Intervention Research Lab Research Assistant

Mentor Name: Deanna Hanson-Abromeit

Location: Hybrid: In-Person & Remote **# of Positions: 1**

Project Description: The Baby-Music Intervention Research (MIR) lab strives to more deeply understand the therapeutic role of music to promote developmental capacity, health and well-being for infants and their families and advance the science of music-based interventions. Research assistants in the BabyMIR Lab contribute to multiple projects. In these projects we are working to unpack how and why music creates change for targeted outcomes such as parent-infant vocal play important for early language learning and reducing withdrawal symptoms for newborns exposed to opioids in utero. Current projects include a community-based parent and infant music intervention, large-scale literature review, and development of a

music intervention for newborns exposed to opioids in utero. We are also working on projects related to maternal health and adult respiratory health outcomes. Research assistants contribute to each of these projects by helping us to develop new interventions, implement data collection and coding, and working with others in a collaborative environment with other researchers and families involved in our projects.

Potential Job Tasks & Responsibility: Research assistants are active contributing members of the lab team. Tasks are varied and include conducting library database searches, reading and summarizing content of research articles, reporting summaries to the project team, coding of video and/or audio recordings of clinical music therapy services, drafting manuscript and grant application sections, and attending weekly lab and mentor meetings. Other responsibilities may include making copies, organizing materials and other administrative tasks. This is a hybrid position. Many tasks can be done off campus as we use collaborative workspaces (e.g., Dropbox, Microsoft Teams), but other tasks will require you to be in the lab setting (e.g., coding video or audio data).

Past Emerging Scholars have been active contributors to the project team, taken lead on several projects, conducted independent studies, and functioned as assistant project managers. Emerging Scholars are encouraged to participate in the spring Center for Undergraduate Research Symposium. Students will be required to complete human subjects training prior to involvement with clinical data. Research assistants should be able to attend and participate in weekly research lab meetings on Wednesdays, 4:00-4:50 p.m.

Student Qualifications & Characteristics: Curiosity, attention to detail, reliability, and the ability to work both independently and collaboratively are essential characteristics for research assistants in the baby-MIR lab. In addition, the student should be trustworthy, have strong communication skills, and maintain confidentiality of sensitive information. We value initiative and innovation, so those with a willingness to ask questions, explore and contribute ideas are encouraged to apply. Basic knowledge of music (e.g., playing an instrument, participation in choir, band or orchestra, music theory) is helpful but not required.

Position #56: Supporting simulation and biometric data collection, analysis, social media, and experiences in FLITE Center

Mentor name: Lisa Dieker

Location: Hybrid: In person and remote **# of positions:** 2

Job description: The FLITE Center at KU is seeking an enthusiastic student to support simulation activities, biometric data collection and analysis, social media communication, and hands-on experiences that help visitors and partners learn about innovative teaching and research. This position is a great opportunity for students interested in technology, education, health sciences, data analysis, or communication.

Role and Responsibilities. In this position, the student will:

- Help set up, run, and reset simulation experiences in the FLITE Center.
- Assist with collecting biometric information such as heart rate, stress indicators, or attention data using approved tools.
- Organize and review biometric data to help the research team better understand patterns and outcomes.

- Contribute to social media posts that highlight activities in the FLITE Center and communicate research in a friendly and accessible way
- Help create engaging experiences for visitors, including demonstrations, tours, and hands-on activities.
- Work closely with faculty, graduate students, and other team members to support ongoing research and events.

How this Role Fits into the Overall Project: The FLITE Center focuses on understanding how people learn through immersive experiences. Simulation and biometric information allow the research team to study how learners respond to realistic teaching and communication situations. By helping with these activities, the student plays an important part in making the simulations run smoothly and ensuring that high-quality information is collected. The social media piece helps the center share discoveries with the KU community and beyond.

Potential Job Tasks & Responsibilities:
General Progression of Tasks Throughout the Academic Year. Tasks are designed to start at an accessible level for a first year student and gradually increase in complexity. Students typically work four to ten hours per week.

Student Qualifications & Characteristics:

Scheduling Requirements:

- Weekly team huddle. Ten to fifteen minutes at the start of your first shift each week to review priorities, upcoming simulations, and tasks.
- Availability in three hour blocks. Simulations and data collection run best in longer blocks. You should be able to schedule at least one three hour block per week. Two blocks per week is ideal if you want more hours or more responsibility.
- Typical operating hours. Weekdays between 9 am and 5 pm. Occasional early evening events may happen a few times per semester and will be scheduled in advance.
- Minimum weekly time. At least four hours per week during the semester.
- Reliability. You must arrive on time for simulations, since late arrivals can delay participants. If something comes up, communicate as early as possible through the team channel.
- Training and onboarding. You will complete required trainings in your first two weeks. Examples include lab safety, device care, data handling, and participant privacy.
- Event support. A few times per semester you may help with a tour, open house, or guest visit. These are scheduled in advance and usually take one to two hours.

Characteristics That Help Students Succeed

- Attention to detail.
- Organized and consistent.
- Comfortable learning new technology.
- Professional communication.
- Curiosity and growth mindset.
- Team player.

- Discretion and respect for privacy.
- Initiative.

Interests or Professional Goals That Fit This Role: You only need interest and motivation to get started. Experience is not required.

- Interest in one or more of the following
    - Education and teacher preparation
    - Health sciences and simulation based training
    - Psychology, human behavior, or learning sciences
    - Data collection and analysis, including basic spreadsheets and graphs
    - Communication, science communication, or social media for education
    - Human computer interaction or wearable technology

Minimum Requirements to Apply

- Currently enrolled KU undergraduate student in any major
- Able to work at least four hours per week in one or two blocks
- Willing to complete required trainings on device care, data handling, and participant privacy
- Comfortable interacting with faculty, graduate students, visitors, and peers

Nice to Have but Not Required

- Familiarity with Google Drive or Microsoft OneDrive for organizing files
- Basic spreadsheet skills such as entering data, using sort and filter, and creating simple charts
- Experience with Canva or similar tools for simple graphics or short videos
- Experience with customer service, peer mentoring, campus tours, or tutoring

Position #57: Self-Determination Learning Center

Mentor name: Lauren Bruno

Location: Hybrid: In person only **# of positions:** 2

Job description: The Self-Determination Learning Center (SDLC) provides high-quality training for educators and service providers on evidence-based practices that enhance self-determination skills. Despite strong research supporting self-determination instruction, many schools and organizations struggle to adopt and consistently use evidence-based practices. The SDLC is currently synthesizing over 20 years of school-based research to create several online trainings as professional development for teachers to learn to deliver evidence-based self-determination practices in the classroom. Emerging Scholars work on this project would support the creation and launch of several trainings that translate research to practice for educators.

Potential Job Tasks & Responsibilities:

- Manage and monitor Canvas modules, including responding to participant questions, tracking learner progress and completion data, and ensuring a smooth and engaging user experience.
- Troubleshoot technical and content-related issues, coordinating with team members as needed to resolve questions efficiently and maintain high-quality course delivery. I

- Identify and implement strategies to more widely market the Self-Determination Learning Center and its products, including supporting marketing efforts through drafting social media content, updating course descriptions, and creating outreach and promotional materials.
- Develop/Establish and manage a recurring newsletter designed to reach a broad audience, highlighting new resources and courses, sharing impact stories, and increasing engagement with the Center's initiatives; while working collaboratively with the Information Dissemination team.

Student Qualifications & Characteristics:

- Demonstrates an interest in inclusive research, including working with and learning from people with disabilities, engaging with community partners, making materials accessible, and valuing strong partnerships.
- Demonstrates an interest in connecting research to practice, especially turning research findings into practical trainings and tools that educators, families, practitioners, and self-advocates can understand and use in everyday life.
- Demonstrates skills for organization, including the ability to manage multiple projects and deadlines using a clear system to stay on track.
- A clear openness to feedback and willingness to learn and grow.
- Strong attention to detail, making sure materials and communication are clear, accurate, and high quality.

Position #58: KU Social Development Lab (Educational Psychology)

Mentor name: Meagan Patterson

Location: Hybrid: In-Person and Remote **# of positions: 1**

Job description: The KU Social Development Lab, directed by Educational Psychology faculty member Meagan Patterson, conducts research on various aspects of social development. We are interested in how children, adolescents, and young adults develop both in and outside of educational contexts. General areas of interest include how children and adolescents think about gender, race, and politics, as well as how adults talk with children about these topics. There are typically 4-6 current projects in the lab each semester. Current projects in the lab address the following research questions: What encourages and discourages students' interest in engineering careers? How do teachers' beliefs about race influence their teaching practices? What leads parents to bring their children with them to protests? How do college students respond to racially biased statements they see online? How does ADHD impact students' experiences in college? How do college students learn about personal finance topics on social media?

Potential Job Tasks & Responsibilities:

The position may include:

- Reviewing study materials (such as surveys, interview questions, and recruitment flyers) and giving feedback on them
- Transcribing interviews (listening to a recorded interview and creating a written record of what was said)
- Entering data (typing responses from interviews into a computer data file)
- Coding data (reviewing survey responses or interview transcripts and classifying responses into categories)

- Reading and summarizing articles on topics related to the research projects in the lab
- Conducting interviews with students, parents, or teachers Research assistants will also be expected to attend regular meetings with the research team and the faculty supervisor.

Student Qualifications & Characteristics:
Preferred qualifications for this position include:

- An interest in psychology or education
- Strong organizational skills
- Strong written communication skills
- Prior experience working with children

Position #59: Trade War Lab Research Assistant

Mentor Name: Jiakun Zhang
Location: In-Person Only **# of Positions:** 2
Project Description: The KU Trade War Lab (TWL) is inviting highly motivated and team-oriented undergraduate students to apply for an internship position. Students will work 5-10 hours weekly on several projects studying the political economy of the US-China Trade War, along with other subjects in political economy. The lab provides a strong foundation for students interested in data science, government service, trade law, or graduate school in economics, political science, and international affairs. Students can find out more about the lab via our Substack as well: https://www.tradewarlab.com/about

Potential Job Tasks and Responsibilities: The TWL supports funded research, provides hands-on student training, facilitates exchanges with other academic centers, and engages in campus outreach on the politics of trade and conflict. Our work combines qualitative and quantitative methods to study the political economy of trade and conflict, and our student research assistants receive training in survey research, statistical analysis, and tools such as Excel and R. The TWL also offers support for students applying for Undergraduate Research Awards to further develop their research and skills. The lab offers a great foundation for students interested in research, government, data science, and/or graduate school.

Student Qualifications & Characteristics
Working with the TWL will help students build skills and proficiency in the following areas:

- knowledge of economics, business, and political science
- Ability to work with data in spreadsheets, statistical software, and AI platforms
- Writing, editorial, and research skills

We are particularly looking for self-motivated students with knowledge of East Asian languages, data analysis skills, writing skills, organizational skills, good time management, and/or a strong interest in social science research. Students must be available for weekly lab meetings (held in Blake Hall) and be available for 5+ hours of independent work.

Position #60: Archaeological Data Integration and digital Storytelling at Bluefish Caves

Mentor Name: Lauren Norman

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project Description: Bluefish Caves in the northern Yukon, Canada, is one of the most significant Pleistocene archaeological sites in North America, with major implications for understanding early human presence in the western hemisphere. The Odyssey Archaeological Research Program at KU is leading a renewed, community-engaged investigation of the site in partnership with the Vuntut Gwitchin First Nation, the Yukon Government, and the Canadian Museum of History. The project brings together decades of legacy data from original excavations in the 1970s and 1980s with newly generated archaeological, geological, genomic, and paleoenvironmental datasets. As part of this effort, the team has developed a shared digital framework "" including an ArcGIS StoryMap, a metadata and data curation system, and a multi-audience dissemination plan "" to make this complex body of evidence accessible to researchers, students, and the public. The Emerging Scholar will join the team at an exciting moment, contributing directly to this framework while developing and completing an independent research project. The Emerging Scholar will work alongside the project's postdoctoral researcher and other team members. No prior research or archaeological experience is required, only curiosity, attention to detail, and a willingness to learn. The position is designed to provide a first-year student with a meaningful introduction to archaeological research, digital humanities methods, and scholarly communication. The student will increase their self-efficacy in supervised work, self-directed research, and team meetings.

Potential Job Tasks and Responsibilities:

The student will contribute to the following ongoing project activities:

- Assist with the continued development of the project's ArcGIS StoryMap, including adding content, organizing narrative sections, and reviewing materials for clarity and accessibility
- Support data integration efforts by helping to digitize, organize, and document legacy and contemporary datasets according to established metadata standards
- Assist with the preparation of outreach materials for multiple audiences, including academic collaborators, the general public, and community partners

These tasks will be performed under close mentorship with increasing autonomy and will build the student's familiarity with archaeological data, digital research tools, and ethical research practices. In addition to contributing to team tasks, the student will develop and carry out an independent research project suitable for presentation at the KU Undergraduate Research Symposium at the end of the academic year. The research project will be scoped in collaboration with the supervising team at the start of the year based on the student's interests and the needs of the project.

Possible project directions include:

- Archival and historiographic research: Tracing the history of archaeological investigation at Bluefish Caves through published literature, digitized field notes, and archival records, and producing a structured summary or timeline suitable for integration into the StoryMap
- Legacy dataset analysis: Selecting one category of legacy data (such as faunal records or excavation logs) and systematically documenting its scope, condition, and research potential as a contribution to the team's data curation framework

- Digital storytelling and science communication: Evaluating how archaeological sites comparable to Bluefish Caves are presented to public and community audiences online, and developing recommendations or new content for the project's own outreach materials

The student will be supported throughout the research process, from developing a research question and methodology to writing up findings and preparing a poster or presentation for the Undergraduate Research Symposium (or other venue).

Student Qualifications & Characteristics: For the first few months, the student will need to be available during the week to meet in the lab in Fraser Hall at times to be arranged with the mentor (within the work week, anywhere from 8am-4pm). These times will be set up with the student as accommodates the mentor and student schedules. The student will be required to attend the laboratory meetings (to be determined each semester based on schedules). These are typically every 2 weeks for about an hour. The student will be paid for those hours, as they are working. Interest in archaeology, history, Indigenous studies, digital humanities, environmental science, or related fields welcome. Attention to detail and willingness to work carefully with complex materials. Enthusiasm for learning and collaborating in a team environment. Self-driven learning beyond the basics of digital tools introduced by the mentor.

Position #61: Guns in American Art: A Material Culture database Project

Mentor Name: Margaret Kelley

Location: Hybrid: In-Person and Remote **# of Positions:** 2

Project Description: This project explores how firearms appear in American art from the colonial period to the present. It treats guns as cultural objects that carry artistic, social, and historical meaning. The project centers on building a large-scale database of artworks featuring firearms across a wide range of media, including painting, sculpture, photography, illustration, and mixed media. The student researcher will play a central role in developing this database. Their work will include identifying relevant artworks through library and archival research, compiling detailed metadata, and organizing and categorizing visual materials. Over time, this database will support scholarly analysis of recurring themes such as representation, embodiment, aesthetics, and the relationship between firearms and identity in American culture. The project offers students hands-on experience with interdisciplinary research methods at the intersection of American Studies, sociology, and art history, with a strong focus on material culture analysis.

Potential Job Tasks and Responsibilities:

Student Responsibilities:

- Conduct library and database research to identify artworks featuring firearms Locate and evaluate sources using KU Libraries resources and digital archives
- Compile and organize artwork data (artist, title, date, medium, location, themes)
- Assist in developing and refining coding categories for the database
- Participate in regular meetings to discuss findings and research strategies
- Contribute to the development of a structured research dataset for long-term use

Learning Goals for the Student:

- Develop research skills using academic databases and archival sources Gain experience with interdisciplinary methods in American Studies
- Learn how to build and manage a research database
- Strengthen skills in visual analysis and interpretation of cultural objects
- Understand how large-scale research projects are developed and sustained
- Build confidence in independent research and scholarly inquiry

Student Qualifications & Characteristics:

- Availability for a consistent weekly meeting
- Ability to work in 2"“3 hour blocks Commitment of 5"“7 hours per week
- Strong attention to detail and organization
- Reliability and steady follow-through
- Comfort working independently and asking questions

Interests and Goals:

- Curiosity about art, culture, and American life Interest in developing research and library skills.
- Openness to interdisciplinary work
- Students who approach the work with care and curiosity will do well in this role.

Position #62: Cultural Psychology Research

Mentor Name: Glenn Adams

Location: Hybrid: In-Person and Remote **# of Positions: 2**

Project Description: Generally speaking, the Cultural Psychology Research Group studies the relationship between sociocultural systems and psychological experience. During the next academic year, we are seeking assistance for 2 projects:

1. Historical Knowledge and Collective Memory study: This project examines how people remember, understand and interpret history, and how these interpretations relate to identity, collective memory, and civic life. Drawing on survey and experimental methods, the project explores how different ways of engaging with historical events (and narratives) interact with attitudes about the present and future.
2. Conceptions of Development in Puerto Rico study: This project investigates how people in Puerto Rico understand ideas about "development," including how these ideas relate to history, identity, and imagined futures. The project uses survey and qualitative methods (through focus groups), to examine how participants construct and negotiate meanings of development in a colonial context.

Potential Job Tasks and Responsibilities: Work on all the projects can happen remotely, off campus.

- Assistants for the historical knowledge project will code and organize survey, experimental and qualitative data related to how participants understand and remember historical events, and how they create historical narratives, using frameworks that we have developed for the project.
- Assistants for the conceptions of development in Puerto Rico project will assist with editing and organizing focus group interview transcripts in Spanish, using procedures that we have developed for the project.

Additionally, they will aid in qualitative data analysis following a codebook provided to them. Initially, assistants will learn skills in an apprenticeship capacity.
Eventually, we anticipate that students will be able to administer the procedure on their own, without direct supervision. We will train the student to perform some basic analytic procedures. We will then encourage the student to prepare a poster reporting results of these analyses for presentation in the annual KU undergraduate research symposium or the annual KU Symposium for Undergraduate Psychology Engagement and Research.

Student Qualifications & Characteristics: The position requires no specific qualifications or characteristics beyond intellectual curiosity and a passion for learning how to do social science research. Priority will be given to applicants with Spanish proficiency for work on focus group transcripts, though Spanish is not an absolute requirement. Availability for (hybrid/virtual) meetings of the Cultural Psychology Research Group (time TBA) is preferred but not necessary. These meetings typically feature critical discussion of written work and/or (graduate) student presentations of research.

Position #63: Integrating novel technologies to enhance communication in individuals with speech disorders

Mentor Name: Panying Rong

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project Description: The Speech Science and Disorders Lab is conducting a study to improve how communication disorders are detected, tracked, and managed in people with neurodegenerative diseases. Being able to speak and communicate is a central part of who we are and how we connect with others. However, this ability is often affected in conditions such as amyotrophic lateral sclerosis (ALS) and Parkinson's disease. We still do not fully understand why these changes happen, which can delay diagnosis and limit access to optimal clinical care. This project aims to address these gaps by applying new technologies, including AI and computer-based tools, to create a simple, noninvasive way to detect and monitor early changes in speech such as how speech muscles move and how the voice sounds that drive the development of communication problems. The research scholar working on this project will help with ongoing studies and gain hands-on experience in human subjects research. They will also learn how to use innovative technologies to collect and analyze data related to speech, movement, and behavior.

Potential Job Tasks and Responsibilities: Here are the main tasks and responsibilities for this role, listed from simpler to more advanced:

Participant support:

- Help recruit participants by sharing study information (for example, distributing flyers or reaching out to community centers)
- Schedule lab visits for participants
- Send reminders and follow-up emails to confirm appointments and help participants stay engaged in the study

Lab maintenance:

- Clean and sanitize lab equipment after each session
- Follow lab guidelines to keep the workspace organized and running smoothly

Research support:

- Help set up equipment for participant sessions
- Assist with collecting data during participant sessions
- Support basic data processing, including coding and entering research data

Student Qualifications & Characteristics: Students who are interested in health-related fields or biomedical research are encouraged to apply. The selected student is required to be organized, responsible, and able to complete assigned tasks reliably and on time. They will receive training from the mentor on how to collect and process research data at the beginning of the project. Careful attention to detail is especially important for this role.

Position #64: Gender Attitudes Through the Gen Z lens

Mentor Name: Lisa-Marie Wright

Location: Hybrid: In-Person and Remote **# of Positions:** 2

Project Description: This project explores how Generation Z is making sense of gender roles in family life, work, and relationships at a cultural moment when messages about gender are pulling in different directions. Rather than assuming young adults are simply becoming more egalitarian or more traditional, we seek to understand how young adults are thinking about gender roles and where those ideas are coming from. We are particularly interested in the role social media plays in shaping their attitudes and identities, including phenomena like the "tradwife" movement. The project combines original survey, interview, and focus group data with analysis of social media content. Planning is still in the early stages with the research team currently reviewing literature and drafting survey and interview materials. Data collection will begin in the fall and continue in the spring. Undergraduate research assistants will have the opportunity to participate in multiple dimensions of the project, including providing feedback on survey and interview questions, helping to ensure that the study reflects the experiences and concerns of people in Generation Z.

Potential Job Tasks and Responsibilities

Tasks will be structured to begin at an entry level and expand over the year as you build skills and confidence. Depending on the project's needs and your interests, tasks may include:

- Assisting with basic literature searches using KU Libraries and Google Scholar
- Identifying and collecting examples of social media content related to gender roles and "tradwife" themes
- Learning research ethics and responsible data handling
- Assisting with participant recruitment and data collection
- Basic coding of social media posts for recurring themes
- Participating in weekly research team meetings
- Depending on the specific tasks, you may also be trained in how to use Qualtrics (survey design tool), Zotero (citation management software), Excel, Microsoft Teams, and Canva.

Student Qualifications & Characteristics

- Curiosity about gender, culture, or social media
- Attention to detail and reliability
- Openness to learning new tools and asking questions

- No prior coursework in sociology or research methods required.

Position #65: Ensemble Psychology Lab Assistant

Mentor Name: Emily Rossin

Location: Hybrid: In-Person and Remote **# of Positions:** 1

Project Description: Research Operations Assistant - The Ensemble Psychology Lab seeks an undergraduate research assistant to support ongoing research projects related to leadership, motivation, group culture, and organizational systems within music ensembles and performance environments. This position is ideal for students interested in research, psychology, education, organizational systems, or analytical work.

The student researcher will work collaboratively with faculty and graduate researchers to support the preparation, organization, and management of research materials connected to ongoing scholarly studies in music education and ensemble psychology.

Potential Job Tasks and Responsibilities:

- Organizing and preparing research datasets
- Assisting with sourcing and organizing archival collections of performance, adjudication, and related school data
- Coding and categorization of qualitative data
- Supporting literature review organization and development
- Supporting graduate research assistants with project preparation tasks
- Assisting with research database management and long-term project organization

Student Qualifications & Characteristics

- Organized and dependable
- Curious and willing to learn
- Comfortable working both independently and collaboratively
- Detail-oriented
- Comfortable with Microsoft Office products and large-scale digital file management systems such as Dropbox

Position #66: Ensemble Psychology Lab - Research Communications & Outreach Assistant

Mentor Name: Emily Rossin

Location: Hybrid: In-Person and Remote **# of Positions:** 1

Project Description: The Ensemble Psychology Lab seeks an undergraduate research assistant to support the communication and public dissemination of ongoing research related to leadership, motivation, group culture, and organizational systems within music ensemble and performance environments. This position is ideal for students interested in communication, media, design, psychology, education, or public-facing scholarships.

The student researcher will assist with translating research and scholarly ideas into accessible and engaging materials for educators, students, and broader audiences.

Potential Job Tasks and Responsibilities:

- Assisting with educational and research presentation material
- Supporting development of public-facing research summaries and visual resources
- Assisting with digital outreach development and dissemination
- Supporting media organization, editing, and graphic preparation
- Assisting with the translation of scholarly ideas for broader audiences

Student Qualifications & Characteristics

- Creative, organized, and curious
- Interested in communication and educational outreach related to research-informed content
- Comfortable working collaboratively
- Familiar with platforms such as Substack, Canva, Facebook, Instagram, X, and TikTok

Position #67: AI Slop, Media, and Audiences

Mentor Name: Judy Watts

Location: Hybrid: In-Person and Remote **# of Positions:** 1

Project Description: AI-generated videos, also commonly known as AI slop, are increasingly common on social media sites. Although many people have strong opinions about these short-form videos, we know little about their effects on attention span, enjoyment, identity, and the sharing of such content. The purpose of this research is to understand how audiences process AI-generated videos and what effects they might have.

Potential Job Tasks and Responsibilities: You will work closely with Dr. Watts to help find and curate videos for a research project. No prior research experience is necessary, although experience with screen recording and capturing video content is helpful. We will teach you everything you need to sample existing social media content, as well as conducting and executing an online research study. Tasks will vary from week to week and may also include assistance with survey creation, organizing materials, summarizing information, and conducting a literature review. The majority of this work can be done remotely on your computer, but we will meet from time to time in person.

Student Qualifications & Characteristics: A successful emerging scholar for this project will be someone who enjoys media and is curious about how individuals engage with their media environment. The emerging scholar should be self-motivated, organized, and willing to learn aspects of social science research. Because much of this work can be conducted remotely, the ideal student should be able to work independently and communicate effectively about their progress and questions that arise.

Position #68: Healthy Population Aging on Cape Cod (USA) and in Rural Malawi (Africa)

Mentor Name: Tyler Myroniuk

Location: Hybrid: In-Person and Remote **# of Positions: 1**

Project / Job Description: Students will assist Prof. Myroniuk with literature reviews, literature summaries, and data analyses in service of two major grant proposals and research projects--one based in Cape Cod, MA and the other in rural Malawi. The students' work will be a key component of finalizing National Institute of Health (NIH) grant submissions, in conjunction with scholars at the University of Pennsylvania, University of Massachusetts Boston, and the KU Medical Center. Students' work will also be crucial to research manuscripts produced. No prior research experience is required but a willingness and interest to do population health research is a must.

Potential Job Tasks and Responsibilities:

- Students will conduct scientific literature searches using Google Scholar and the KU library system
- Students will summarize the literature in Word documents.
- Students will help analyze new data (collected Summer 2026) from Cape Cod as well as new data collected from Malawi in 2025 (and years prior).
- Students will help in scientific manuscript preparation.

Student Qualifications & Characteristics:

- Meeting once per week and/or email updates once per week. (Can be in-person or virtual).
- Attention to detail and willingness to do social science research, using quantitative data, are a must.
- Willingness to read scientific articles (even if no prior experience) and learn a statistical software.
- Interest in doing research in your career--preferably in a health-related field.

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