Adapting your UURAF or Mid-SURE Submission for the Undergraduate Research Experience (URE) Module

Brief Description BEFORE	Edited Brief Description
Ms. Spartan conceived of and developed a qualitative research project to study pharmacist-client interactions. She submitted the IRB application and related forms.	Conceived and developed a qualitative research project to study pharmacist-client interactions; submitted IRB application and related forms.

UURAF Abstract	UURAF Abstract Converted to URE Brief Description
The quality of the environment a person lives in can have drastic impacts on the health and future of that person, and while everyone should be guaranteed a safe environment, this is not the case. Countless studies have shown that Black, Indigenous, and People of Color (BIPOC) communities are more likely to be neglected when it comes to environmental health and access. This only amplifies the environmental and social injustices that those communities already experience. An emerging area of study is water justice, which includes ensuring communities have access to clean water for drinking, subsistence, recreation, and cultural uses. Existing water justice studies have shown that lower income and non-white groups are more likely to live near degraded water bodies, but they are conducted at local scales without commonly measured water quality variables. Patterns of water injustices can only be found if sampling of water bodies is occurring. Race/ethnic data from the 2010 U.C. Census and water quality data from LAGOS are used to answer the question: Are lakes located in BIPOC communities sampled as thoroughly as lakes located in non-BIPOC communities? The LAGOS database spans the 48 conterminous states of the U.S., allowing us to fill the gap of water justice trends on a large-scale. A framework has been developed to analyze the data using ArcGIS, a spatial mapping software, and Rstudio, a statistical computing program.	Examined patterns of water sampling in racial/ethnic minority and majority communities using 2010 Census data and LAGOS. Developed framework to analyze data using ArcGIS and Rstudio.

UURAF Title	Edited UURAF Title for URE submission
I'm Still Here (For How Long?): Examining the Success of Women-Created Musicals on Broadway	Examining the Success of Women-Created Musicals on Broadway

UURAF Abstract	Edited UURAF Abstract for URE Submission
Women make up more than 2/3 of theatre-going audiences, yet they only make up 17% of positions on Broadway creative teams. This can be chalked up to multiple factors: taste discrimination, statistical discrimination, and the commonly-held belief that women will prioritize their family life over their career, and thus be a detriment to a show in development. However, when women are given the chance to serve in creative positions on Broadway, their shows have a high chance of recouping its initial investments. Women deserve a place on creative teams not only because of the high chance of financial success, but also because of their ability to make great collaborators and to use their ability to tap into emotions to write authentic characters and stories that resonate with audiences.	Examined factors contributing to women's low numbers in Broadway creative teams. Read literature, interviewed women working in Broadway, and created presentation of findings.

UURAF Abstract	Edited UURAF Abstract for URE Submission
Changes in Earth's magnetic field are known to influence the behavior of organisms from all five kingdoms of life. In mice, the cryptochrome-2 repressor is the recognized protein responsible for their magnetoreception capabilities. The extent of the receptor's influence is unknown, and whether its associated responses are due to subconscious instinct or conscious choice. We tested if the mice learn to immediately run to the corresponding area they were trained based on the presence or reduction of Earth's magnetic field, that they possess a conscious recognition of Earth's geomagnetic field. To test for this, we trained three CD-1 mice to run to a designated side of an experimental area given the state of their exposure to Earth's magnetic field, normal or weakened. The results of the study supported strong evidence that magnetic field influences mice impact on	Examined if cryptochrome-2 repressor impacted by strength of Earth's magnetic field. Set up experiments, trained mice, record results, assisted with data analysis.

roaming ($p = .0028$), with a reduced magnetic field decreasing the amount of time the mouse roamed. Additionally, these findings support with little evidence that mice can consciously detect Earth's geomagnetic field ($p = .0765$). This suggests that the cryptochrome-2 protein may be more complex than initially understood and that magnetic fields could be a conscientious stimulus impacting mouse behavior and location preferences. This is crucial for understanding the extent of the capabilities of the cryptochrome-2 protein, applicable to the influence of Earth's geomagnetic field on humans. As humans also possess the protein, such research is especially useful for understanding the arising field regarding the impacts of magnetic field exposure on human health.	