

# UROC-PREP

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University of Arizona; Spanish, Global Studies

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## **School Resource Officers: Can your Zip code make you a criminal?**

**ABSTRACT:** School Resource officers are sworn in Law Enforcement Officer implemented in school staff as an attempt to try and keep schools safe. Implementation of programs like the “COPS in Schools” grant program, give schools more funding for hiring SRO’s. The purpose of this study is to examine how the use of School Resource Officers criminalizes a certain type of student. Previous research has focused on the benefits of having of School Resource Officers, but fail to look at the issues with having School Resource Officers present in schools. By looking at two rural and two urban school districts in Texas, this study will demonstrate how the use of School Resource Officers criminalizes a certain type of students and catapult them into the “school to prison pipeline”, or in other words fast track them into the criminal justice system.

# Alexis Garibay

University of Arizona; Psychology

Mentor: Dr. Tammi Walker and Ellen Carrol – Law and Psychology



## **Understanding the Lack of Judicial Diversity Through Social Cognition Theories**

**ABSTRACT:** Diverse representation in the judiciary is essential for a just system. Women and non-White individuals are vital to upholding fairness within the United States legal system. When discussing the issue of lack of judicial diversity, a common argument is that the applicants from underrepresented backgrounds do not pursue judicial roles. Based on past social cognition literature, we argue that there is a perceived incompatibility between the values and goals of underrepresented candidates and their accompanying ideas about what judiciary roles represent and involve. The following research questions drive this project: What are the goals and values of underrepresented judiciary applicants and do they differ from the goals and values of White men in judicial roles? To address this issue, we conducted structured interviews with current and retired judges to first outline the goals, perspectives, and experiences among a diverse array of judges. This research employs several interlinked social cognition theories to examine diversity in the judiciary from the perspective of individuals who hold identities that are presently underrepresented in judicial roles. An intervention will then be developed to highlight aspects of the judicial role that subsequently make the application process more appealing to a wider range of applicants; thus, diversifying the bench. Increasing diversity within the judiciary simultaneously increases public confidence in the ability of the courts to make sound, equitable decisions.

# Hailey Higgins

University of Arizona; Speech, Language, and  
Hearing Sciences

Mentor: Dr. Elena Plante and Dr. Mary Alt – Speech,  
Language, and Hearing Sciences



## **Determining the Relationship between Morphological Awareness and Literacy Success for Students with Dyslexia**

**ABSTRACT:** The following study defines dyslexia and the importance of strong literacy skills for academic and future success. Students with dyslexia struggle with reading and writing, and various studies infer that increasing morphological awareness in the classroom is beneficial for all students, including students with specific language impairments like dyslexia. This study includes 12 first and second grade students diagnosed with dyslexia. Each participant will be assessed on various literacy skills under the dynamic assessment of morphological awareness (DMMA) created by the Wolter et al., (2020) study. Limitations include lack of IRB approval, and restrictions to human subjects testing due to covid-19. Intentions to continue with this study will start during my graduate education as early as fall 2021. This study seeks to determine if morphological awareness skills improve literacy for students with dyslexia, and to encourage more inclusive teaching methods to improve literacy for all students.

# Hannah Johnson

University of Arizona; Biomedical Engineering

Mentor: Dr. Elizabeth Hutchinson – Biomedical Engineering



## **Identification of In-Vivo MRI Markers of Vascular Injury in a Ferret Model of Closed-Head TBI**

**ABSTRACT:** With the high prevalence of traumatic brain injury (TBI) and its potentially devastating outcomes, there is a need for research in order to better evaluate and treat brain injuries. Extensive research has been done on the biomarkers of TBI in animal models, but to determine the translational value of preclinical findings, studies must replicate human injury as faithfully as possible. This study aimed to identify more human-relevant biomarkers in a closed-head injury in a ferret model by using a human-similar battery of magnetic resonance imaging (MRI) scans. Eleven ferrets were included in a longitudinal study on the effects of TBI. A battery of thirteen scans was developed based on the MRI modalities most commonly used in humans and implemented at multiple timepoints following injury, depending on injury severity. This study focused on five scan types (Arterial Spin Labeling and pre- and post-gadolinium contrast enhancement T2 fluid-attenuated inversion recovery and modified driven equilibrium Fourier transform) in order to analyze blood flow and blood-brain barrier disruption. Images were registered to a common space for analysis using Advanced Normalization Tools (ANTs) medical software and a robust image processing pipeline. Results are pending completion of the processing pipeline and statistical analysis. Comparison of quantitative vascular MRI scans across time and across subject will reveal injury biomarkers that could potentially be used clinically to improve diagnosis and treatment of traumatic brain injury.