

who have used primarily either meth/amphetamine or cocaine for at least 5 years. The interviews will be coded for salient and recurrent themes and analyzed for code frequency, cooccurrences, clustering of themes and representative excerpts to highlight emergent themes as well as stressors and resilience factors at multiple levels. We aim to assess for substance use patterns, multiple domains of resiliency, medical and psychiatric complaints, and risk reduction strategies. We will recruit participants to match recent decedents from acute stimulant toxicity in various domains including salient demographic information and neighborhood characteristics. **RESULTS/ANTICIPATED RESULTS:** The anticipated results include a qualitative interview guide for living persons using stimulants in San Francisco to be used to gain insight into the community, illustrate participants' substance use practices, and allow for better characterization of several discrete resiliency factors that have protected the participants and other community members from suffering lethal stimulant toxicity. We expect to identify individual components (e.g. use patterns, use of harm reduction supplies), interpersonal/social factors (e.g. drug using network, friendships, community connection), and structural influences (e.g. access to care, safe use sites, house and economic stability) that all play a role in resiliency against lethal stimulant toxicity. **DISCUSSION/SIGNIFICANCE:** Stimulant use is common, along with rising deaths involving stimulants in urban counties and in smaller rural/non-metro counties which are disproportionately affected, posing a public health challenge. We will find discrete, modifiable risk and resiliency factors that can be manipulated to minimize the chances of outcomes like overdose and death.

### **Racial-Ethnic Differences in Antipsychotic Initiation Among Youth with Diagnosed ADHD, Depression, or Conduct Disorder**

Linnea Sepe-Forrest<sup>1</sup>, Richard Meraz<sup>2</sup>, Sydney Adams<sup>2</sup>, Brian M. D'Onofrio<sup>2,3</sup> and Patrick D. Quinn<sup>2,3,4</sup>

<sup>1</sup>Indiana University Bloomington; <sup>2</sup>Department of Psychological & Brain Sciences, Indiana University Bloomington; <sup>3</sup>Program in Neuroscience, Indiana University Bloomington and <sup>4</sup>School of Public Health

**OBJECTIVES/GOALS:** This study examined racial-ethnic differences in antipsychotic initiation within psychiatric diagnostic groups. This is a follow-up to our prior work, which reported that, overall, youth from minority backgrounds had 30-65% lower odds of initiating antipsychotics compared to White youth. **METHODS/STUDY POPULATION:** This study used 2009-2021 data from Optum's<sup>®</sup> Clinformatics<sup>®</sup> Data Mart, a database containing longitudinal patient information from nationwide commercial insurance claims. We created three separate samples of antipsychotic users and matched non-user controls between the ages of 6-17 years old. These groups contained individuals with clinically diagnosed ADHD, conduct disorder, and depressive disorder, respectively. We used conditional logistic regression to estimate the odds of antipsychotic initiation based on race-ethnicity within each diagnostic group. **RESULTS/ANTICIPATED RESULTS:** There were no racial-ethnic differences in the odds of antipsychotic initiation among youth diagnosed with ADHD. Among youth with depression diagnoses, Asian youth had 19% lower odds of initiating antipsychotics and Hispanic youth had 11% lower odds compared with White youth. Similar

results were observed for conduct disorders, with Asian and Black youth having approximately 10% lower odds of initiating antipsychotic treatment and Hispanic youth having 18% lower odds relative to White youth. **DISCUSSION/SIGNIFICANCE:** Previously observed lower rates of antipsychotic initiation among racial-ethnic minority groups may be at least partially due to factors leading to disparities in diagnosis. Further research is needed to evaluate factors that may lead to differential antipsychotic use, as the disparities may occur upstream of receiving clinical diagnoses.

### **29 Cardio-Omentopexy to Reduce Myocardial Scarring and Promote Regeneration**

Stephen Stachnik, Dawn Parsell, Joseph Forbess and Kristopher Deatrick

University of Maryland Medical Center

**OBJECTIVES/GOALS:** While the current management of single ventricle repairs has drastically prolonged life expectancy, the repair fails over time primarily through pathologic inflammation and fibrosis. Our goal is to demonstrate that cardio-omentopexy can decrease inflammation and fibrosis in swine after cryoinjury. **METHODS/STUDY POPULATION:** A cryoinjury is created using a liquid nitrogen cooled probe to the right ventricle of 15-20kg swine for three minutes. In half the groups the omentum is attached to the heart over the area of the injury. The swine are recovered and monitored for 4 or 8 weeks at which time they are euthanized. The injured area is evaluated via histological and immunohistochemical testing for markers of inflammation and scarring including collagen type, scar area, macrophage activity. **RESULTS/ANTICIPATED RESULTS:** Currently, we have successfully validated the animal model to create myocardial scar validated by histological testing. We anticipate that the addition of omentopexy to cryoinjury will decrease scar area, fibrosis and markers of chronic inflammation. Additionally, we expect an increase in myocytes in the area of injury. We expect that this will occur through the anti-inflammatory and protective mechanism of the omentum. **DISCUSSION/SIGNIFICANCE:** Cardio-omentopexy, if able to decrease fibrosis and preserve myocytes, may provide a useful adjunct to the treatment of single ventricle repair by prolonging the longevity of the repair. Additionally, as these repairs often require a ventriculotomy, decreasing the operative scar may preserve myocardial function.

### **30 Characteristics of Infant Emergency Department Utilization**

Mary Beth Howard<sup>1</sup>, Leticia M. Ryan<sup>2</sup> and Oluwakemi Badaki-Makun<sup>2</sup>

<sup>1</sup>Johns Hopkins School of Medicine and <sup>2</sup>Johns Hopkins School of Medicine, Department of Pediatrics

**OBJECTIVES/GOALS:** Frequent utilizers of emergency departments (ED) make up a substantial share of overall ED use. Within pediatric emergency departments (PED), infants represent an age group that make up a disproportionate share of PED visits. The objective was to compare patterns of PED use for children less than 1 year of age by visit frequency and resource utilization. **METHODS/STUDY POPULATION:** Retrospective cohort study of infants less than 1