NATIONAL HISPANIC SCIENCE NETWORK ON DRUG ABUSE

Seventeenth Annual International Conference

October 4-6, 2017 Sheraton Crescent Phoenix, AZ

Mission Statement

The National Hispanic Science Network on Drug Abuse is dedicated to improving the health equity of Hispanics by increasing the amount, quality and dissemination of interdisciplinary translational research; and fostering the development and advancement of Hispanic scientists to promote future leaders.

National Steering Committee

Patricia E. Molina, M.D., Ph.D.
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Department of Physiology
Director, Alcohol & Drug Abuse Center
Louisiana State University Health Sciences Center

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Professor, School of Social Work
University of Southern California

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Professor, Clinical Internal Medicine
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Professor, Department of Medicine
Harvard Medical School

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Professor, Department of Epidemiology
Michigan State University

Carlos Bolanos-Guzman, Ph.D.
Associate Professor, Department of Psychology
Texas A&M University

Alice Cepeda, PhD, MS
Associate Professor
University of Southern California
School of Social Work

Felipe González-Castro, Ph.D.
Professor, College of Nursing & Health Innovation
Arizona State University

Flavio Marsiglia, Ph.D.
Distinguished Foundation Professor of
Cultural Diversity and Health
& Director,
Southwest Interdisciplinary Research Center (SIRC)
School of Social Work - College of Public Programs
Arizona State University

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Ramón de la Fuente Muñiz, México

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Professor, Department of Psychology
The University of Texas at El Paso

Yonette F. Thomas, Ph.D.
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New York Academy of Medicine (NYAM)
Senior Advisor
Association of American Geographers (AAG)
Vice President, Interdisciplinary Association for
Population Health Science

EARLY CAREER LEADERSHIP CHAIR

Jennifer Reingle Gonzalez, Ph.D., M.S.
Associate Professor, Division of Epidemiology,
Human Genetics, and Environmental Sciences
University of Texas Health Science Center at
Houston

Welcome from the Conference Chairs

On behalf of the Conference Planning Committee and the Steering Committee of the National Hispanic Science Network (NHSN), we welcome you to the 17th Annual International Conference of the NHSN. Our theme this year is "Hispanic Drug Abuse Pipeline: Bridging Diversity, Interdisciplinary Training, and Translational Science." The centerpiece of this meeting has focused on the concept of a pipeline, and the many issues related to the training, research, and dissemination factors that affect the field of drug abuse research. This year's conference recognizes that reducing drug and alcohol use and related health disparities among ethnic minorities requires an approach that transcends boundaries and enhances the transdisciplinary research pipeline necessary to improve health equity in our communities. As such, the conference will capitalize on the opportunity to engage in a dialogue and bi-directional communication with members of the practice community. We will kick-off the 3-day conference with a "Phoenix Footprint" community – science interaction panel that includes local community, social and health service providers, and scientific investigators from Arizona State University. Discussions will highlight unmet and underserved needs in the areas of alcohol, tobacco and other drugs; HIV/AIDS; mental health; and obesity, diabetes and metabolic disorders.

The Conference Planning Committee has identified several special conference themes that will be covered in the following panels: 1) Brain Mechanisms and Cognitive Control of Eating; 2) The Wall Between Criminal and Social Justice; 3) Promoting Diversity in the Scientific Workforce Pipeline; 4) Novel Treatment Avenues for Alcoholism informed by Biological Science; 5) Frontiers: Latino Drug Abuse Research from a Veterana to the Next Generation of Scientists

This year we will also honor Dr. Hortensia Amaro, who was selected as our honorary "Veterana." We recognize her lifetime achievements by giving her the opportunity to present her work in a historical and prospective view of drug abuse research in Latinos. She has also identified two up-and-coming speakers that will co-present with her on the future of brain science in the study of drug abuse.

These themes guided the interdisciplinary plenary panels which feature distinguished scientists who have made significant contributions to each of these scientific areas. We are also excited to be joined by our plenary speaker, Dr. Marisela Morales. This year, we will continue to feature a special panel on grant writing. The program also includes career development activities for young scientists such as an Early Career Investigator Panel, poster session, POD mentoring initiative, and an evening social networking event. Additional breakout sessions highlighting scientific research on drug addiction and social determinants of health are also featured in this year's conference.

The planning committee co-chairs depend on a network of individuals who volunteer their time and energy to the NHSN. We would like to give a special thanks to the conference planning committee: Drs. Agudelo, Arroyo, Bazzi, Cano, Izquierdo, Levison, Marsiglia, Natividad, Ramirez, Sanabria, Souza-Smith, Ulibarri, Wilson, Zavala. A special thanks as well to all those members who volunteered their time to review abstracts for the breakout sessions and poster session. We want to give special recognition to Betsy Giaimo who has provided unconditional support and guidance to the Conference Chairs and Committee for the past 9 years. Finally, it is with pleasure that we acknowledge our funders: NIDA, NIAAA, and NEI as well as the support of LSUHSC, USC, and the Southwest Interdisciplinary Research Center (SIRC), & Center for International Translational Intervention Research (CITIR).

In summary, we are excited about the distinguished panelists and presenters on the program. We expect three days of stimulating and interactive scientific discussion, as well as essential networking, mentoring, and wholesome fun – the attributes that characterize our NHSN conferences.

Be sure to "Like" the NHSN on Facebook (https://www.facebook.com/NationalHispanicScienceNetwork) follow @theNHSN on Twitter, and contribute to the highlights, updates, and discussions about the conference using #NHSN2016!

Conference Chairs:

Alice Cepeda, Ph.D., *2017 NHSN Scientific Conference Co-Chair*
Associate Professor, University of Southern California, School of Social Work (alicecep@usc.edu)

Laura O'Dell, Ph.D., *2017 NHSN Scientific Conference Co-Chair*
Professor, Psychology Department, University of Texas, El Paso (lodell@utep.edu)

Wednesday October 4, 2017

12:00 PM–12:15 PM WELCOMING REMARKS (Crescent Ballroom B-C)

Alice Cepeda, Ph.D., *2017 NHSN Scientific Conference Co-Chair*
Associate Professor, University of Southern California, School of Social Work (alicecep@usc.edu)

Laura O'Dell, Ph.D., *2017 NHSN Scientific Conference Co-Chair*
Professor, Psychology Department, University of Texas, El Paso (lodell@utep.edu)

12:15 PM–12:30 PM Blessing from HOPI Representative Debra Baker (Crescent Ballroom B-C)

THE PHOENIX FOOTPRINT

CHAIRS: **Flavio Marsiglia, Ph.D.,** *Regents' Professor in the School of Social Work, Director, Southwest Interdisciplinary Research Center (SIRC), & Center for International Translational Intervention Research (CITIR), College of Public Service and Community Solutions, Arizona State University (marsiglia@asu.edu);* **Federico Sanabria, Ph.D.,** *Assistant Professor, Department of Psychology, Arizona State University (Federico.Sanabria@asu.edu);* **Miguel Ángel Cano, Ph.D., MPH,** *Assistant Professor, Department of Epidemiology, Robert Stempel college of Public Health & Social Work, Florida International University, (mcanojr@fiu.edu)*

12:30 PM–1:30 PM COMMUNITY INTERACTION PANEL: A COMMUNITY PERSPECTIVE ON THE NEEDS OF UNDERSERVED COMMUNITIES (Crescent Ballroom B-C) (Abstracts p.18)
MODERATOR: **Flavio Marsiglia, Ph.D.,** *Professor, Arizona State University (marsiglia@asu.edu)*

PRESENTERS **Yvonne Fortier, LPC, LISAC,** *Vice President of Diversity, Terros Health*

R.J. Shannon, *HIV Integrated Care Program Coordinator, Native Health*

Teresa Peña, MEd, CHI *Cultural Sensitivity Administrator, Mercy Maricopa Integrated Care*

Yolanda Konopken, RD, CDE, CPT, *Community Education, St Vicent de Paul*

1:30 PM - 1:45 PM Transition

1:45 PM - 2:45 PM ROUNDTABLE DISCUSSION WITH 4 THEMES (Crescent Ballroom B-C)

1) Alcohol, tobacco and other drugs
2) HIV/AIDS
3) Mental health
4) Obesity, diabetes and metabolic disorders

2:45 PM–4:00 PM SCIENTIFIC SESSION 1: ADDRESSING UNMET UNDERSERVED NEEDS THROUGH PARTNERSHIPS (Crescent Ballroom B-C) (Abstract p.18)
CHAIR: **Felipe G. Castro, MSW, Ph.D.,** *Professor, Arizona State University, College of Nursing & Health Innovation (felipe.castro@asu.edu)*

2:50 PM **Nancy Gonzales, Ph.D.,** *ASU Foundation Professor, Department of Psychology (Clinical), College of Liberal Arts and Sciences, Arizona State University (nancy.gonzales@asu.edu)*

3:05 PM **Bertram Jacobs, Ph.D.,** *Director, School of Life Sciences and Professor, Virology, Arizona State University (bjacobs@asu.edu)*

3:20 PM **Elias Robles-Sotelo, Ph.D.,** *Associate Professor, Director, Health-Behavior Research Laboratory, Arizona State University (Elias.Robles@asu.edu)*

3:35 PM **Gabriel Shaibi, Ph.D.,** *Associate Professor and Southwest Borderlands Scholar, College of Nursing & Health Innovation, Arizona State University (Gabriel.Shaibi@asu.edu)*

4:00 PM–4:15 PM SUMMATION (Phoenix Ballroom B-C)

CHAIRS: **Federico Sanabria, Ph.D.,** *Assistant Professor, Department of Psychology, Arizona State University (Federico.Sanabria@asu.edu);* **Flavio Marsiglia, Ph.D.,** *Arizona State University (marsiglia@asu.edu)* **Miguel Ángel Cano, Ph.D., MPH,** *Assistant Professor, Department of Epidemiology, Robert Stempel college of Public Health & Social Work, Florida International University, (mcanojr@fiu.edu)*

4:15 PM–6:00 PM POSTER SESSION & EARLY CAREER MIXER (Phoenix Ballroom A) (Abstracts pp 25-37)

Thursday October 5, 2017

8:15 AM- 9:45 AM NEW INVESTIGATORS IN DRUG ABUSE RESEARCH (Crescent Ballroom B-C) (Abstracts p.18-19)
Co-CHAIRS: **Marisela Agudelo, Ph.D.,** *Assistant Professor, Department of Immunology, Florida International University (magudelo@fiu.edu) and* **Eden Robles, Ph.D., MSW, BSW,** *BUILD Postdoctoral Scholar, Department of Psychology, The University of Texas at El Paso (erobles9@utep.edu)*

8:20 AM OVEREXPRESSION OF A STRESS PEPTIDE IN THE BRAIN SELECTIVELY INCREASES NICOTINE SELF-ADMINISTRATION IN FEMALE RATS (Abstract p.18)
Kevin Uribe, M.S., *Graduate Student, Department of Psychology, The University of Texas at El Paso (kpuribe@miners.utep.edu)*

8:40 AM CHANGES IN MIRNA SPECIES FOLLOWING LIFESTYLE INTERVENTION AMONG OBESE LATINO YOUTH WITH PREDIABETES. (Abstract p.18)
Jamie Karch, RN, *Graduate Student, College of Health and Nursing Innovation, Arizona State University (jkarch@asu.edu)*

9:00 AM DESIGN AND IMPLEMENTATION OF A NOVEL APPROACH TO MEASURE FLAVORED WATERPIPE TOBACCO EFFECTS (Abstract pp.18-19
Mayra E. Vargas-Rivera, M.D., *Post-Doctoral Research Associate, Department of Epidemiology, Robert Stempel College of Public Health and Social Work, Florida International University (mvargasr@fiu.edu)*

9:20 AM DRUG USE AND SEXUAL RISK ASSOCIATED WITH HAVING SEX WITH MEN IN THE LAST 12 MONTHS AMONG MEN WHO USE METHAMPHETAMINE IN A MEXICO-U.S. BORDER CITY (Abstract p.19)
Oralia Loza, Ph.D., *Assistant Professor, Department of Public Health Sciences, College of Health Sciences, The University of Texas at El Paso (oloza@utep.edu)*

9:45 AM–10:00 AM TRANSITION

10:00 AM -11:30 PM **SCIENTIFIC SESSION 2**
BRAIN MECHANISMS AND COGNITIVE CONTROL OF EATING: FROM MOLECULAR TO BEHAVIOR (Crescent Ballroom B-C) (Abstract p.19-20)
CHAIR: **Alicia Izquierdo, Ph.D.,** *Associate Professor, Department of Psychology, University of California, Los Angeles (aizquie@psych.ucla.edu)*

10:00 AM A ROLE FOR STRIATAL ENKEPHALIN IN THE ABILITY OF FOOD-PAIRED CUES TO INCREASE MOTIVATION FOR FOOD REWARDS (Abstract p.19)
Ian Mendez, Ph.D., *Assistant Project Scientist, Semel Institute for Neuroscience, University of California, Los Angeles (imendez@ucla.edu)*

10:25 AM THE IMPACT OF DIET ON BRAIN FUNCTION AND DISEASE (Abstract p.20)
Fernando Gomez-Pinilla, Ph.D., *Professor, Department of Neurosurgery, and Department of Integrative Biology and Physiology, University of California, Los Angeles (fgomezpi@ucla.edu)*

10:50 AM TRANSCRANIAL DIRECT CURRENT STIMULATION OF DORSOLATERAL PREFRONTAL CORTEX AS A TREATMENT FOR CRAVING AND INTAKE OF PALATABLE FOOD (Abstract p.20)
Mary M. Boggiano, Ph.D., *Associate Professor, Department of Psychology, The University of Alabama at Birmingham (boggiano@uab.edu)*

11:15 AM–12:45 PM MEMBERSHIP LUNCHEON (Crescent Ballroom B-C)

12:45 PM–1:00 PM TRANSITION

1:00 PM -2:30 PM **SCIENTIFIC SESSION 3**

JUST SAY KNOW: THE WALL BETWEEN CRIMINAL AND SOCIAL JUSTICE (Crescent Ballroom B-C) (Abstract pp.20-21)

CHAIR: **Alice Cepeda, Ph.D.,** *Associate Professor, School of Social Work, University of Southern California (alicecep@usc.edu)*

1:00 PM A CRITICAL EXAMPLE: PRENATAL CANNABIS EXPOSURE AND COGNITIVE FUNCTIONING (Abstract p.20)

Ciara Torres, Ph.D., *Post-Doctoral Research Fellow, School of Social Work, Columbia University (cat2119@columbia.edu)*

1:25 PM HEALTH DISPARITIES AMONG SEXUAL AND GENDER MINORITY HISPANICS/LATINOS: IMPLICATIONS FOR RESEARCH AND CLINICAL PRACTICE (Abstract p.20)

Omar Martinez, MPH, M.S., J.D., *Assistant Professor, Temple University School of Social Work (tug29454@temple.edu)*

1:55 PM COLLATERAL SOCIAL AND HEALTH CONSEQUENCES OF INCARCERATION TRAJECTORIES FOR YOUNG ADULT LATINO DRUG USERS (Abstract p.21)

Avelardo Valdez, Ph.D., *Professor, Suzanne Dworak-Peck School of Social Work, University of Southern California (avelardv@usc.edu)*

2:30 PM–2:45 PM TRANSITION

2:45 PM–3:30 PM **PLENARY PRESENTATION**

NEURONAL DIVERSITY AND MULTILINGUAL NEURONS (Crescent Ballroom B-C) (Abstract p.21)

Marisela Morales, **Ph.D**., *Section Chief, Neuronal Networks Section, Branch Chief, Integrative Neuroscience Research Branch, NIDA Intramural Program, NIH*

3:30 PM–3:45 PM TRANSITION

3:45 PM - 4:45 PM **BREAKOUT SESSION A**

SESSION A1 ENGAGING HISPANICS AND ADDRESSING SUBSTANCE USE IN HIV PREVENTION AND CARE RESEARCH (Crescent Ballroom A) (Abstract p.21)

CO-CHAIRS: **Julie Levison, M.D., MPhil, MPH,** *Instructor in Medicine, Harvard Medical School/ Massachusetts General Hospital (jlevison@partners.org) and* **Angela Robertson Bazzi, Ph.D., MPH,** *Assistant Professor of Community Health Sciences, Boston University School of Public Health (abazzi@bu.edu)*

PRESENTERS HIV PRE-EXPOSURE PROPHYLAXIS AND FACTORS RELATED TO ADHERENCE TO HIV PREVENTION STRATEGIES

Victoria Ojeda, Ph.D., MPH, *Associate Professor of Global Public Health, University of California at San Diego (vojeda@ucsd.edu)*

CHALLENGES AND OPPORTUNITIES TO OPTIMIZE ADHERENCE TO ART IN HISPANICS

Dr. Jose R. Castillo-Mancilla, M.D., *Associate Professor of Medicine, University of Colorado Denver (jose.castillo-mancilla@ucdenver.edu.)*

HIV TESTING, LINKAGE TO AND RETENTION IN HIV CARE IN LATINOS

Julie Levison M.D., MPhil, MPH, FACP, *Instructor in Medicine, Harvard Medical School/Massachusetts General Hospital (jlevison@partners.org)*

SESSION A2 ASK THE ACADEMIC JOURNAL EDITOR (Crescent Ballroom B-C) (Abstract p.22)

Co-CHAIRS: **Virmarie Correa-Fernández, Ph.D.,** *Assistant Professor, Department of Psychological Health and Learning Sciences, University of Houston (vcorreaf@central.uh.edu) and* **Mayra E. Vargas Rivera, M.D.,** *Post-Doctoral Research Associate, Department of Epidemiology, Robert Stempel College of Public Health and Social Work, Florida International University (mvargasr@fiu.edu)*

PRESENTERS **James C. Anthony, MSc, Ph.D.**, *Professor of Epidemiology and Biostatistics, Michigan State University College of Human Medicine (janthony@msu.edu)*

Charles D. Kaplan, Ph.D., *Research Professor and Associate Dean, Research, University of Southern California School of Social Work (cdkaplan@usc.edu)*

Hortensia Amaro, Ph.D., *Dean's Professor, Social Work and Preventive Medicine and Associate Vice Provost, Community Research Initiatives, University of Southern California School of Social Work (hamaro@usc.edu)*

4:45 PM–5:00 PM TRANSITION

5:00 PM - 6:00 PM **BREAKOUT SESSION B**

SESSION B1 NEUROSCIENCE DATABLITZ (Crescent Ballroom A) (Abstract p.22)

CHAIRS: **Arturo Zavala, Ph.D.,** *Associate Professor, Department of Psychology, California State University, Long Beach (arturo.zavala@csulb.edu) and* **Sergio Iñiguez, Ph.D.,** *Associate Professor of Psychology, The University of Texas at El Paso (sdiniguez@utep.edu)*

PRESENTERS **Francisco Flores Ramirez, B.A.,** *Doctoral student, Department of Psychology, The University of Texas at El Paso (fjfloresram@miners.utep.edu)*

Daniela Franco, B.A., *Master's student, Department of Psychology, California State University, Long Beach (dnlfranco12@gmail.com)*

Bryan Cruz, B.A., *Doctoral student, Department of Psychology, The University of Texas at El Paso (bcruz2@miners.utep.edu)*

Ryan Cabrera, *Undergraduate student, Department of Psychology, California State University, Long Beach (Ryan.Cabrera@student.csulb.edu)*

Raul Garcia, B.A., *Doctoral student, School of Life Sciences, Arizona State University (rgarci27@asu.edu)*

Dean Rivera, M.S.W., *Doctoral student, Department of Social Work, University of Southern California (drrivera@usc.edu)*

Rodolfo Flores, M.A., *Doctoral student, Department of Psychology, The University of Texas at El Paso (rjfloresgarcia@miners.utep.edu)*

Luis A. Natividad, Ph.D., *Research Associate, Department of Neuroscience, The Scripps Research Institute (lnativi@scripps.edu)*

Marisela Agudelo, Ph.D., *Assistant Professor, Department of Immunology, Florida International University (magudelo@fiu.edu)*

Federico Sanabria, Ph.D., *Associate Professor, Department of Psychology, Arizona State University (Federico.Sanabria@asu.edu)*

Keith Trujillo, Ph.D., *Professor, Department of Psychology, California State University, San Marcos (keith@csusm.edu)*

Janet Neisewander, Ph.D., *Professor, School of Life Sciences, Arizona State University (janet.neisewander@asu.edu)*

SESSION B2 U.S.-MEXICO BORDER REGION AS A RESEARCH TRAINING GROUND FOR GRADUATE STUDENT RESEARCH IN SUBSTANCE USE AND HEALTH DISPARITIES RESEARCH: TRAINEE PERSPECTIVES AND RESEARCH LEADERSHIP (Crescent Ballroom B-C) (Abstract p.22)

CHAIRS: **María Luisa Zúñiga, Ph.D.,** *Professor, SDSU-UCSD Joint Doctoral Program in Interdisciplinary Research on Substance Use, San Diego State University School of Social Work (mlzuniga@mail.sdsu.edu) and* **Eden Robles, Ph.D.,** *Post-Doctoral Fellow, University of Texas, El Paso, Latino Alcohol and Health Disparities Research Center (erobles9@utep.edu)*

PRESENTERS **Rubi Gonzales,** *Ph.D. Student, Latino Alcohol and Health Disparities Research Center, University of Texas, El Paso (Rgonzales6@miners.utep.edu)*

Juliana Cardoso, *Ph.D. Student, Latino Alcohol and Health Disparities Research Center, University of Texas, El Paso (jdcardoso@miners.utep.edu)*

Erica Landrau, *Ph.D. Student, Health Psychology program, University of Texas, El Paso (elandraucribbs@miners.utep.edu)*

Nicole Pepper, *Ph.D. Student, Joint Doctoral Program in Interdisciplinary Research on Substance Use, University of California San Diego - San Diego State University (npepper@ucsd.edu)*

7:00 PM–10:30 PM DINNER DANCE - (Phoenix Ballroom)

Friday October 6, 2017

8:15AM–9:15 AM GRANT REVIEW SESSION: PEOPLE ARE GETTING FUNDED. WHAT ABOUT ME? (Crescent Ballroom B-C) (Abstract p.22)

PRESENTER **Flavio Marsiglia, Ph.D.,** *Regents' Professor in the School of Social Work, Director, Southwest Interdisciplinary Research Center (SIRC), & Center for International Translational Intervention Research (CITIR), College of Public Service and Community Solutions, Arizona State University (marsiglia@asu.edu)*

9:15 AM–9:30 AM Transition

9:30 AM–11:00 AM **SCIENTIFIC SESSION 4**

PROMOTING DIVERSITY IN THE SCIENTIFIC WORKFORCE PIPELINE (Phoenix Ballroom B-C) (Abstract p.22)

CHAIR: **Laura O'Dell, Ph.D.,** *Professor, Department of Psychology, The University of Texas at El Paso (lodell@utep.edu)*

9:35 AM DIFFERENT PATHS LEADING TO NIH GRANT FUNDING SUCCESS FOR EARLY-STAGE INVESTIGATORS (Abstract p.23)

Albert Avila, Ph.D., *Director of the National Institute on Drug Abuse (NIDA) Office of Diversity and Health Disparities (ODHD) (aavila@nida.nih.gov)*

10:00 AM ENERGIZING WORKFORCE EXCELLENCE BY BROADENING PARTICIPATION AND PROFESSIONAL DEVELOPMENT (Abstract p.23)

Margarita Dubocovich, Ph.D., *Distinguished Professor; Department of Pharmacology and Toxicology; Senior Associate Dean for Diversity and Inclusion, University of Buffalo, Jacobs School of Medicine and Biomedical Sciences (mdubo@buffalo.edu)*

10:25 AM THE ROLE OF UNDERGRADUATE RESEARCH PROGRAMS IN RETAINING AMERICA'S HISPANIC STEM TALENT (Abstract p.23)

Lourdes E. Echegoyen, Ph.D., *Director, Campus Office of Undergraduate Research Initiatives (COURI) The University of Texas El Paso (Lourdes@utep.edu)*

11:00 AM–11:15 AM Transition

11:15 AM–12:15 PM PODS (Phoenix Ballroom A)

12:15 PM–1:15 PM MENTORING LUNCHEON- IT TOOK A VILLAGE: MY OWN MENTORING JOURNEY (Phoenix Ballroom A)

PRESENTER **Flavio Marsiglia, Ph.D.,** *Regents' Professor in the School of Social Work, Director, Southwest Interdisciplinary Research Center (SIRC), & Center for International Translational Intervention Research (CITIR), College of Public Service and Community Solutions, Arizona State University (marsiglia@asu.edu)*

1:15 PM–1:30 PM TRANSITION

1:30 PM–3:00 PM **SCIENTIFIC SESSION 5**

EXPLORING HOW BASIC BIOLOGICAL SCIENCE INFORMS NOVEL TREATMENT AVENUES FOR ALCOHOLISM (Crescent Ballroom B-C) (Abstract p.23)

CO-CHAIRS: **Luis Natividad, Ph.D.,** *Research Associate, Department of Neuroscience, The Scripps Research Institute (lnativi@scripps.edu) and* **Judith Arroyo, PhD.,** *Minority Health and Health Disparities Coordinator, The National Institute on Alcohol Abuse and Alcoholism (jarroyo@mail.nih.gov)*

PRESENTERS

1:35 PM CONTINGENCY MANAGEMENT FOR ALCOHOL USE DISORDERS IN AMERICAN INDIAN AND ALASKA NATIVE COMMUNITIES: IMPLICATIONS FOR CONDUCTING RESEARCH IN DIVERSE COMMUNITIES. (Abstract p.23)
Michael McDonell, Ph.D., *Associate Professor, Director, Behavioral Health Innovations, Elson S. Floyd College of Medicine, Washington University (mmcdonell@wsu.edu)*

2:00 PM MOTIVATIONAL INTERVIEWING CHANGE TALK IN SPANISH AND IN ENGLISH: FINDINGS FROM A RANDOMIZED CONTROLLED TRIAL TO REDUCE HAZARDOUS DRINKING. (Abstract p.24)
Christina Lee, Ph.D., *Assistant Professor, Department of Applied Psychology, Bouvé College of Health Sciences, Northeastern University (Chr.lee@neu.edu)*

2:25 PM EXAMINING RESPONSE TO ADDICTION TREATMENT WITHIN THE BRAIN (Abstract p.24)
Jon M. Houck, Ph.D., *Assistant Professor, Department of Psychology, University of New Mexico, Albuquerque (jhouck@unm.edu)*

3:00 PM–3:15 PM Transition

3:15 PM - 4:45 PM **SCIENTIFIC SESSION 6**

FRONTIERS: LATINO DRUG ABUSE RESEARCH FROM A VETERANA TO THE NEXT GENERATION OF SCIENTISTS (Crescent Ballroom B-C) (Abstract p.24)
CHAIR: **Alice Cepeda, Ph.D.,** *Assistant Professor, School of Social Work, University of Southern California (alicecep@usc.edu)*

PRESENTERS

3:20 PM PEOPLE, PLACES AND DATA: A GUIDED TOUR THROUGH A HISTORICAL SLICE OF LATINO DRUG ABUSE RESEARCH (Abstract p.24)
Hortensia Amaro, Ph.D., *Associate Vice Provost for Community Research Initiatives, Dean's Professor, Suzanne Dworak-Peck School of Social Work and Professor, Preventive Medicine, Keck School of Medicine, University of Southern California (hamaro@usc.edu)*

3:55 PM JUVENILE EXPOSURE TO ANTIDEPRESSANT MEDICATIONS ALTERS PREFERENCE FOR COCAINE IN ADULTHOOD (Abstract p.24)
Sergio Iñiguez, Ph.D., *Associate Professor, Department of Psychology, The University of Texas at El Paso (sdiniguez@utep.edu)*

4:20 PM DYSREGULATION OF ENDOGENOUS CANNABINOID TONE IN THE CENTRAL AMYGDALA CRITICALLY UNDERLIES THE CO-MORBID EXPRESSION OF ANXIETY AND ALCOHOL DRINKING (Abstract p.24)
Luis Natividad, Ph.D., *Research Associate, Department of Neuroscience, The Scripps Research Institute (lnativi@scripps.edu)*

4:45 PM Conference Closing

Speaker Biographies

Alice Cepeda, Ph.D.

2017 NHSN Scientific Conference Co-Chair

Alice Cepeda is currently an associate professor. She was previously in the Department of Sociology and associate director of the Center for Drug and Social Policy Research at the University of Houston. She received her doctoral degree from the City University of New York, Graduate Center. Her work has focused on the social epidemiology of drug use and the related health risk behaviors that disproportionately affect urban Mexican-origin minority populations, including violence, HIV/STI infection risks and mental health conditions. Cepeda's research has also highlighted the unique gendered experiences encountered by females within this cultural context. Her research publications have explored the complex of social determinants, including familial, neighborhood and socio-ecological factors that contribute to drug use and negative social and health outcomes among vulnerable minority populations.

Laura O'Dell, Ph.D.

2017 NHSN Scientific Conference Co-Chair

Dr. O'Dell attended UTEP as an undergraduate in 1987 and then went to Texas A&M to complete her B.S. degree in Psychology and Biology. She received her Ph.D. in 1997 in the Behavioral Neuroscience Program at Arizona State University in the area of drug addiction. She then completed a post-doctoral training position at Amethyst Technologies, where she studied the toxic effects of cocaine in the brain of mice that are genetically susceptible to the toxic effects of cocaine. She then completed a second post-doctoral position at The Scripps Research Institute where she also worked as a Staff Scientist for 4 years. She then returned to UTEP in 2005 for a faculty position in the Department of Psychology. Her research interests are in the neural basis of drug addiction with a particular emphasis on tobacco use in vulnerable populations, such as adolescents, females, and persons with diabetes.

Yvonne Fortier, LPC, LISAC

Yvonne Fortier is Vice President of Diversity for Terros Health. She is licensed as an LPC and LISAC. Yvonne has worked for Terros Health since Oct. 2014, and previously worked for Native American Connections, as Director of Clinical Services for 11 years. Yvonne is a clinical leader, cultural trainer, teacher, author and mentor/advisor to college/university students. She has written and culturally adapted curricula for children, and practices and mentors in combining cultural healing ways with evidence-based practices in counseling. Yvonne's community service work, locally, regionally and nationally, has ranged from clinical care standards and practices, to health equity, inclusion and collective impact.

Teresa Peña, MEd, CHI

Teresa Peña, M.Ed., CHITM is the Cultural Sensitivity Administrator for Mercy Maricopa Integrated Care, the Regional Behavioral Health Authority for Maricopa County. Ms. Peña has worked in the field of Behavioral Health Services for almost 25 years and Cultural Competence in particular for the past 9 years. She is very community oriented and has extensive experience working with families, youth and children, community mobilization, program development and evaluation. Ms. Peña is a Certified Healthcare Interpreter and a certified Cultural Competence trainer for the ADH/DBHS Cultural Competence 101: Embracing Diversity, she is also bilingual and bicultural. For the past eight years, Ms. Peña has focused on cultural diversity implementation in the public behavioral health system, helping to create culturally responsive environments and compliance with the federally mandated culturally and Linguistically Appropriate Service standards (CLAS).

Yolanda Konopken, RD, CDE, CPT

Yolanda Perez Konopken, RD, CDE, has been active in the field of health, disease prevention, and nutrition education for more than 40 years. She is a clinical specialist in diabetes management and medical nutrition therapy. She is currently working as a Community Health Consultant. Specialties include program development and implementation in the fields of diabetes education and prevention, family nutrition programs, and promoting cultural sensitivity for the Hispanic community. Certifications include; Certified Insulin Pump Trainer (CPT), Certified Trainer in Childhood and Adolescent Weight Management ADA, and Certified Teacher for Maricopa Community Colleges. Memberships include the Academy of Nutrition and Dietetics, the American Diabetes Association, the American Association of Diabetes Educators. She is a graduate of the University of California, Berkeley.

R. J. Shannon

Ms. RJ Shannon, newly retired, served as Manager for the Integrated HIV Services for Native Health after working for the Arizona Department of Health Services as the Community Engagement and Mobilization Coordinator for the HIV Prevention Program role for 15 years while working in the HIV/AIDS arena for 18 years. RJ is well known for her abilities as a lecturer, workshop facilitator and community mobilizer when addressing the needs of Arizona's most vulnerable communities including communities of color, women, youth and children; and the Lesbian, Gay, Bi-sexual, Transgender communities. RJ has written articles and been featured in media over the years in conversations ranging from community violence to sexual health. She chaired the Phoenix Human Relations Commission and the Arizona Hate Crimes Advisory Board, while serving on several City of Phoenix Advisory Boards. She was a section co-chair for the Arizona Public Health Association, sitting Board member of the Arizona Civil Liberties Union, past member of the Arizona African American Legislative Conference Committee; acted as consultant to the Release the Fear project and over the years has served in many different roles with community organizations addressing a myriad of issues. RJ chaired the 2012 & 2013 Phoenix AIDS Walk and after living in Phoenix nearly 35 years feels honored to share thoughts regarding what we were, what we are and what we may become in our pursuit to achieve equity for all.

Nancy Gonzales, Ph.D.

Dr. Gonzales' primary research interests focus on cultural and contextual influences on adolescent mental health. Her work includes research on the role of neighborhood disadvantage and acculturation on children's mental health and on how these influences are mediated or moderated by family processes within Mexican American and African American families. She also is involved in the development and evaluation of culturally sensitive interventions for Mexican American and African American families.

Bertram Jacobs, Ph.D.

Bertram Jacobs is currently serving as School of Life Sciences Director and as a professor of virology. As part of ASU s Biodesign Institute, his research is focused on developing a vaccine for HIV one that prevents infection or extends the lives of HIV patients. Jacobs also leads a group of students every summer to sub-Saharan Africa to teach AIDS prevention to the international community. Jacobs is one of the world s foremost experts on a poxvirus called vaccinia, a cousin of the smallpox virus. He has genetically engineered vaccinia as a vehicle against a number of infectious agents, bioterrorism threats, cancer, and other viruses, including HIV. He also assists HIV/AIDS-related support organizations. He currently serves on the Board of Director s for Aunt Rita s Foundation, on the Advisory Board for Support for International Change, and on the Board of Directors for HEAL.

Elias Robles-Sotelo, Ph.D.

Elias Robles received his doctoral degree in psychology from the University of Arizona in 1990, and completed a post-doctoral fellowship in behavioral biology at the Johns Hopkins University School of Medicine. He joined ASU in 2005, after holding an appointment of research professor in pharmacology and psychiatry at the University of Arkansas College of Medicine. At ASU's West campus, Dr. Robles directs the Health-Behavior Research Laboratory (HBRL) where he studies how a person's behavior and social environment can affect his/her state of health. Some of Dr. Robles' work has focused on addiction to tobacco and other drugs (heroin and prescription opioids), the role of impulsiveness on risky behavior, and the development of technology to improve access to health services for underserved populations. His current research interests include the role of impulsiveness and delay-discounting in the development of addictions and other high-risk behavior; and the use of computer-based interventions to enhance access to health services.

Gabriel Shaibi, Ph.D.

Gabriel Shaibi is an Associate Professor and Southwest Borderlands Scholar in the College of Nursing and Health Innovation at ASU. He holds a joint appointment in the Exercise Science and Health Promotion Program in the School of Nutrition and Health Promotion and research appointments with the Southwest Interdisciplinary Research Center and the Center for Metabolic and Vascular Biology at ASU. Dr. Shaibi's research examines obesity-related health in high-risk and vulnerable populations with an emphasis on understanding and preventing cardiometabolic diseases in obese youth. Dr. Shaibi applies a translational approach that includes basic, clinical, and community research collaborations.

Kevin Uribe, M.S.

Kevin Uribe is originally from Queens, NY and received his bachelor's and Master's degree in Biology from The City College of New York, working in the laboratory of Dr. Kaliris Salas-Ramirez. The work Dr. Ramirez conducts was his introduction to neuroscience and drug research and fell in love with work he was doing. His work examined the plasticity evoked by cocaine exposure in female and male rats. To continue with his passion, Mr. Uribe applied and entered the PhD program and joined the laboratory of Dr. Laura O'Dell at the University of Texas at El Paso (UTEP). Currently, he is entering his third year in the program. Kevin's current project is examining the how over-expression of a stress peptide, CRF, in the nucleus accumbens modulates the rewarding effects of nicotine in female and male rats. He hopes to continue with examining the systems involved in drug reward and drug withdrawal are sex- and hormone dependent and the mechanisms through which hormones affect drug reward. In his free time, he enjoys cooking and reading science-fiction books.

Jamie Karch, RN

Jamie Karch, an emergency department Registered Nurse and Arizona State University alumni born and raised in Arizona, is a research assistant under the mentorship of Dr. Felipe Gonzalez Castro and PhD student Tara Bautista. Jamie's interest in research began as a Barrett the Honors College student when she completed her thesis defense focusing on genetic markers for prediabetic Latino youth. Jamie was a Bidstrip fellow, a member of the Initiative for Maximizing Student Development (IMSD), a program that promotes student's exposure to research and presents opportunities for PhD programs after undergraduate studies, as well as a contributor to Dr. Shabi's Every Little Step Counts program. Jamie is currently assisting in Dr. Castro's lab on projects focusing on adaptation drug education programs in middle schools as well as drug relapse prevention in low income women. Jamie is also completing requirements for medical school and is seeking to apply to MD/PHD programs to further her research experience in personalized medicine.

Mayra E. Vargas-Rivera, M.D.

Dr. Mayra E. Vargas-Rivera is a post-doctoral research associate in the Department of Epidemiology at the Robert Stempel College of Public Health and Social Work at Florida International University (FIU). She also serves as the lab manager for the Epidemiology Clinical Research Laboratory, the first established lab in South Florida for tobacco smoking research. Her current projects focus on investigating novel methods for tobacco use and its effects on smokers, such as the impact of hookah tobacco on public health. Originally from Camuy, Puerto Rico, Dr. Vargas-Rivera completed her BS degree in Biology at Iowa State University before earning her MD from Ross University School of Medicine. She has extensive experience in implementing and conducting research with a focus on minority populations experiencing health disparities, as well as teaching clinical research methodology. She is committed to addressing the needs of populations that have been disproportionately burdened by the epidemic of HIV, tobacco, and/or alcohol abuse, and has a strong interest in research that makes a difference in improving outcomes that will achieve health equality. Dr. Vargas-Rivera has also worked for the landmark Hispanic Community Health Study/Study of Latinos at both the Northwestern University and University of Miami Field Centers. Her other academic and research interests include the effects of stress on quality of life, well-being promotion, as well as cost-efficiency of health care systems.

Oralia Loza, Ph.D.

Dr. Oralia Loza is Assistant Professor at The University of Texas at El Paso. Her research interests are focused on understanding and documenting substance abuse and risks behaviors for HIV, Hepatitis C Virus (HCV), other sexually transmitted infections (STIs) among high-risk populations on the U.S.-Mexico border region, including transgender women, persons who use or inject drugs, and migrants. She is currently working with researchers, clinicians, and community partners addressing barriers to care among LGBTQ communities, specifically transgender women. She looks forward to building on these experiences and research findings continue collaborations with interdisciplinary research teams on both sides of the border.

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Ian Mendez, Ph.D.

Dr. Ian Mendez has over 15 year of experience working in Cellular and Behavioral Neuroscience, and through excellent mentorship, has acquired the technical expertise, research knowledge, and problem-solving abilities necessary to address exciting and novel research questions. The primary aim of his research is to elucidate the signals and circuits of the brain that become dysregulated following repeated exposure to rewards and how these changes ultimately contribute to changes in motivational, hedonic, and cognitive processes. Specifically, his research investigates aberrant reward seeking and taking behaviors, impaired economic cost-benefit decision making, and how brain reward systems interact with metabolic mechanisms to promote feeding disorders and obesity. These processes are relevant to a myriad of psychiatric disorders, with particularly strong implications for addiction. His research investigates these conditions by utilizing experimental methods that he has learned across his career, including methods in biology, pharmacology, behavior, genetics, and neurochemistry. In addition to Dr. Mendez' research interests, he is also interested in establishing excellence in research training for students. He has provided hands-on training in the laboratory to over 30 undergraduate and graduate students across his career, and aims to continue his education in mentorship and pedagogy. Ian believes that the training, experiences, and mentorship he has received from talented scientists, in numerous and diverse laboratories across the country, has allowed him to obtain a clear understanding of the skills necessary to manage an active research environment. Ian is currently in his 4th year as a postdoctoral scholar and has begun investigating potential careers at leading academic institutions. Dr. Mendez' long-term goal is to manage a productive and collaborative neuroscience laboratory, with a particular focus on enhancing student training opportunities.

Fernando Gomez-Pinilla, Ph.D.

Fernando Gomez-Pinilla is a Professor in the Departments of Neurosurgery at the UCLA Medical School, and Integrative Biology and Physiology. He has pioneered research about the molecular mechanisms by which diet and exercise influence the CNS. His studies are funded by the National Institute of Heath. He has about 150 articles published in elite scientific journals, and has been plenary speaker in important international events around the world (Japan, China, Korea, Singapore, Australia, Norway, Denmark, Germany, Hungary, Finland, Italy, Spain, Mexico, France, Brazil, Chile, South Africa). His research constantly receives intense media attention from important TV stations and magazines around the world such as The Economist, Der Spiegel, New York Times, etc. Dr. Gomez-Pinilla earned his doctoral degree in Neuroscience from the University of California Los Angeles, and his undergraduate degree from the University of Chile.

Mary M. Boggiano, Ph.D.

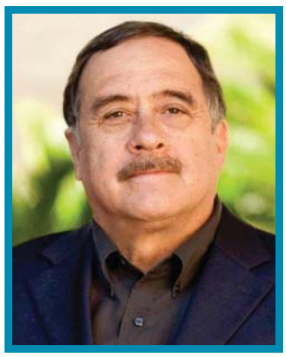
Dr. Mary Boggiano is Associate Professor in the Department of Psychology at The University of Alabama at Birmingham (UAB). She received her Ph.D. in Experimental Psychology from The University of Texas at El Paso and conducted her post-doctoral training at the University of Cincinnati College Of Medicine. Dr. Boggiano (also published as Mary M. Hagan) first conducted animal research focused on elucidating neural-behavioral interactions to promote binge-eating and developed rat models of stress-induced overeating and obese binge-eating still in use by other labs. Currently her lab is exploring motives behind intake of palatable food for reasons other than hunger with an original validated scale in children, adolescents, adults, and weight-loss seeking patients. She is also testing the efficacy of transcranial direct current stimulation (tDCS) to reduce food craving and palatable food intake in adults with binge-eating disorder and obesity and using tDCS with EEG, dopamine, and opioid agents, as a tool to better understand the neural substrates and functions involved in compulsive overeating.

Ciara A. Torres, Ph.D.

Dr. Ciara A. Torres received her B.S. in Biology (’07) from the Universidad de Puerto Rico, followed by an M.A. (’09) and M.Phil. (’10) in Cellular, Molecular and Biomedical Studies, and a Ph.D. (’14) in the area of Neuropsychopharmacology from Columbia University. While her dissertation and past postdoctoral research focused on understanding the molecular effects of recreational drugs in animal models, she understands that drug use cannot be reduced to pharmacological analysis alone. Contextual factors such as culture, race and socioeconomic status, are also important to consider. Therefore, she is passionate about helping others, both in the academic and larger community, to think critically about the effects of drugs in and out of the brain. Some of Dr. Torres’ current research interests include investigating the impact of drug-related policies on pregnant women and mothers, whether these policies are based on empirical data, and the discriminatory enforcement of these policies.

Omar Martinez, MPH, M.S., J.D.

Dr. Omar Martinez is an assistant professor in the School of Social Work at Temple University. He completed his MPH in Health Policy and JD in Health Law at Indiana University in 2011 and 2012, respectively. He later went on to obtain an MS in Biostatistics at Columbia University in 2014. In 2015, Dr. Martinez completed his postdoctoral fellowship in Behavioral Science Research and HIV Prevention at Columbia University. In 2013, he was awarded the NIMHD Extramural Loan Repayment Program for Health Disparities Research. His research interests lie in addressing health disparities affecting Latinos, especially immigrants and sexual and gender minorities. His past and current research has pertained to syndemic factors and HIV risk, development and implementation of HIV prevention programs, and health inequalities research.



Avelardo Valdez, Ph.D.

AVELARDO VALDEZ is a professor at USC, School of Social Work and Sociology. He has a Ph.D. from UCLA. His research focuses on the relationship between substance abuse, violence, and health issues. He is a recipient of numerous grants from the National Institute on Drug Abuse and other federal institutes. He was appointed by the National Academy of Sciences to the Committee on the Causes and Consequences of High Rates of Incarceration that published The Grow of Incarceration in the United States (2014). He served on Lieutenant Governor Gavin Newsom‘s Blue Ribbon Commission on Marijuana Law and Policy in California (2015). Dr. Valdez was recently appointed by the Los Angeles County Office of Cannabis Management to the Advisory Cannabis Working Group that will prepare recommendations for cannabis regulations in Los Angeles County. He is currently a standing member of the Community Influences on Health Behavior Internal Review Group at the National Institutes of Health.

Marisela Morales, M.S., Ph.D.

Dr. Morales is currently a Section Chief of the Neuronal Networks Section and Branch Chief of the Integrative Neuroscience Research Branch at NIDA Intramural Program. She is also the Director Coordinator of the Cores at NIDA Intramural Program, and the Director of the Histology Core and Electron Microcopy Core. She is originally from Mexico. As undergraduate student she gained a strong background in virology, biochemistry and chemistry (National School of Biological Sciences at the Instituto Politecnico Nacional, Mexico). She was awarded degrees in master science and Ph.D. from The Institute of Experimental Biology, Mexico, which provided her with the skills to approach brain analysis at the ultrastructural, molecular and cellular levels. Her Ph.D. was in Cell Biology and Biochemistry in which she applied molecular biological approaches to manipulate cellular mechanism within specific biochemical pathways in fungi. As a postdoctoral fellow, she applied her training in biochemical, molecular and cellular mechanisms to pioneer the characterization of cytoskeletal molecules in the brain. As an alcohol research trainee (at the Alcohol Research Center at the Scripps Research Institute in la Jolla, CA) she was trained in research and theories of drug addiction, and began to implement experimental approaches to examine the molecules, cells and neuronal pathways central to the neurobiology of drug addiction. As an independent scientist (since 2004), she has been implementing a scientific program to address the following questions: what is the brain circuitry through which addictive drugs have their habit-forming actions, and what are the neuroadaptations in this circuitry that accompany the transition from recreational to compulsive drug-taking? In the USA, she has developed her career as independent scientist in the intramural NIH program. As a neuroscientist, she has produced more than 100 peer-reviewed publications. She has received several awards, including: the “Presidential Early Career Award for Scientists and Engineers” (PECASE Award, USA), the “NIDA Director’s Award of Merit”, and the “NIH Director’s award”.

Flavio Marsiglia, Ph.D.

Dr. Flavio F. Marsiglia is the director of the Southwest Interdisciplinary Research Center (SIRC), an exploratory center of excellence on minority heath and health disparities funded by the National Institutes of Health. Marsiglia is also Director of the Center for International Translational Intervention Research (CITIR). CITIR coordinates an international scholars’ research training program and conducts research and training in partnership with universities in China, Guatemala, Mexico, Spain, Taiwan and Uruguay. Marsiglia’ s research on cultural diversity and youth substance use is widely recognized, highly influential in the prevention field, and credited with a measurable reduction in drug use and other high-risk behaviors among youth in Arizona, across the US and in other countries. He has developed and tested culturally grounded interventions to prevent substance abuse especially among Latino and other minority populations of the Southwest, including the school-based “keepin’it REAL” substance-abuse model prevention program that has been extensively replicated and tested in the U.S. and internationally. He has published more than 140 peer-reviewed articles that have significantly advanced knowledge about Latino adolescent risk and protective factors and the relationship between acculturation and health.

Albert Avila, Ph.D.

Dr. Albert Avila is the Director of the Office of Diversity and Health Disparities (ODHD) within the National Institute on Drug Abuse (NIDA). There, he leads and develops the diversity and health disparities capacity building efforts for NIDA and provides guidance to the NIDA Director on related initiatives. His primary goal for the NIDA ODHD is to enhance the number of underrepresented scientists conducting drug abuse research and receiving independent grant support. In addition, he works across NIDA on health disparities research initiatives. Dr. Avila received his doctorate in pharmacology from Georgetown University during which he investigated the effects of cocaine, withdrawal, and stress on the neuroimmune response. Following his postdoctoral training in pain neurotransmission at the National Institute of Dental and Craniofacial Research (NIDCR), he became an Intramural Training Director, leading programs for pre and post-doctoral trainees, and subsequently a Health Scientist Administrator at NIDCR managing extramural research training and career development programs. He joined NIDA in 2008, where he served as a Program Official for five years in the Division of Neuroscience and Behavior and managed a grant portfolio in the areas of neuroimmunology, psychopharmacology, HIV and research training as they relate to drug abuse.

Margarita Dubocovich, Ph.D.

Margarita L. Dubocovich, PhD, is SUNY Distinguished Professor and Inaugural Senior Associate Dean for Diversity and Inclusion in the Jacobs School of Medicine and Biomedical Sciences at University at Buffalo. Dubocovich retired from Northwestern University as Professor Emerita to serve as Chair of UB Department of Pharmacology and Toxicology from 2008 to 2016. She received her PhD in Pharmacology from the University of Buenos Aires in Argentina. The world's foremost authority on melatonin research, Dubocovich established the pharmacology of functional melatonin receptors, which revolutionized the field. Her pioneer findings significantly broadened the scientific understanding of melatonin's impact on circadian rhythms, sleep disorders, and depression. The owner or co-owner of three patents on agents developed for her research and author of 175 articles, reviews and chapters, she has received continuous funding since 1982. A passionate educator, Dubocovich has worked tirelessly to build culturally diverse and academically inclusive communities of undergraduate and graduate students, postdocs and junior faculty engaged in bioscience research. She is director of the Collaborative Learning and Integrated Mentoring in the Biosciences (CLIMB) Program, founded at Northwestern University and instituted at UB in 2009, the co-director of UB Institute for Strategic Enhancement of Educational Diversity, and the principal investigator of the UB CTSA-linked KL2 Mentored Career Development Award for junior faculty. These programs promote research-training, career and professional development, and mentoring needed for success. Dubocovich has received numerous international honors for her seminal research and professional service, including the 2005 Award for Outstanding Scientific Contributions from the Latin-American Congress of Pharmacology, the 2011 Aaron B. Lerner Pioneer Award for Outstanding Melatonin Research, and the 2012 PhRMA Foundation Award in Excellence in Pharmacology and Toxicology, 2011 Distinguished Postdoctoral Mentor Award; 2015 Excellence in Graduate Student Mentoring Award; 2017 CSTEP Outstanding Research Mentor Award and the 2017 UB President's Medal (2017).

Lourdes E. Echegoyen, Ph.D.

Dr. Echegoyen is the Director of the Campus Office of Undergraduate Research Initiatives (COURI), a unit that opened under her leadership in September 2010. As director of COURI, her goal is to incorporate the best of all high impact educational practices into undergraduate research training to ensure UTEP students achieve academic and professional success. Through collaborations with faculty mentors from all disciplines, COURI's mission is to enrich the experience of UTEP students by facilitating their training in research, scholarly, or creative activities, enhancing their academic success and their professional development, and showcasing the results of their work. COURI's responsibilities include increasing student awareness of internal and external research opportunities, organizing and delivering a series of professional development workshops for undergraduate researchers and their faculty mentors, writing proposals and assisting faculty interested in including an undergraduate research component in their grant applications, administering externally and internally funded programs, assisting in the development of strategies that integrate research experiences into course-work, hosting two campus-wide undergraduate research symposia per year, providing advice and leadership for the creation of interdisciplinary teams supporting undergraduate researchers, and catalyzing domestic and international collaborative partnerships for undergraduate research participation. COURI runs both domestic and international research programs spanning all areas of STEM and is expanding into the liberal arts and business.

Michael McDonell, Ph.D.

Michael McDonell is an Associate Professor in the Elson S. Floyd College of Medicine and a member of the Program of Excellence in Addiction Research at Washington State University. Dr. McDonell's NIAAA-funded work includes developing and testing the effectiveness of behavioral treatments for alcohol use disorders in two populations who experience alcohol related disparities: adults with co-occurring serious mental illness and American Indian and Alaska Native communities. In partnership with four American Indian and Alaska Native (AI/AN) communities Dr. McDonell is leading two NIH-funded randomized studies of a contingency management intervention for alcohol use disorders in AI/AN communities. Through this work, he has established experience in the cultural and logistical adaptation of incentive based approaches in low-resource and rural settings. Michael McDonell received his B.A. from Gonzaga University and his Ph.D. in Clinical Psychology from Washington State University.

Christina S. Lee, Ph.D.

Dr. Lee is a licensed psychologist. For over a decade, her programmatic research has investigated evidence-based treatments for substance use and its dissemination, with the mission of reducing health inequities related to substance use among urban under-served populations. She has published on unique risk factors for substance use among immigrants, and has used clinical trial methodology to test models of adaptation of motivational interviewing. Her work has identified sociocultural stressors as key treatment moderators among heavy drinkers from different Hispanic sub-groups. A member of the Motivational Interviewing Network of Trainers since 2006, Dr. Lee has trained, supervised, and developed quality assurance procedures to monitor high treatment fidelity in Spanish and English. Dr. Lee also has an active program of practice-based research at various community sites: examining treatment utilization and process quality indicators for integrated care at the South End Community Health Center in Boston, which serves a high proportion of Latino/a primary care patients; treatment retention in a suboxone support program, and assessing behaviors and processes of change among opioid dependent clients attending a methadone clinic in Boston. As part of her commitment to utilizing evidence-based treatments with under-served populations, Dr. Lee helped to establish both the integrated care (2013) and suboxone support (2016) programs. The combined objectives of these two inter-related areas are: (1) to determine the sociocultural factors that influence risk and resiliency factors in substance use behaviors; (2) develop effective preventative and intervention programs for addiction informed by understanding of underlying mechanisms of behavior change in minority/non-minority populations, and (3) use current research findings to disseminate evidence-based treatment in the community.

Jon M. Houck, Ph.D.

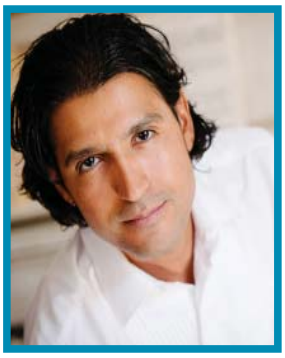
Jon Houck's interst is translational neuroscience, in particular the neurobiological mechanisms of behavior change, and his research has focused on the application of neuroimaging and psychotherapy process research to the study of behavior change. Specifically, he is using magnetoencephalography (MEG) to explore the neural substrate of motivational interviewing (MI). He is interested in the psychotherapeutic process and in treatment outcomes, and has applied multiple behavior coding systems, including the Sequential Code for Observing Process Exchanges (SCOPE) and the Motivational Interviewing Skill Code (MISC) in his research.

Hortensia Amaro, Ph.D.

Hortensia Amaro is Dean's Professor of Social Work and Professor of Preventive Medicine, USC Keck School of Medicine. Her research has focused on substance use and co-occurring disorders treatment and HIV prevention, authored more than 150 scholarly publications, many widely-cited; and launched treatment programs for Latina and African American women. She is currently conducting a NIDA-funded randomized clinical trial on the efficacy of a mindfulness-based relapse prevention intervention in a predominantly Latina sample in substance use disorders treatment that investigates neural mechanisms in early recovery. Previously, Amaro was with Northeastern University for 10 years, as Associate Dean, Distinguished Professor of Health Sciences, and founder and Director of the university's Institute on Urban Health Research. For 18 years prior to that, she was Professor in the Boston University School of Public Health. She served as Vice-Chair of the Boston Public Health Commission as an appointee by the late Mayor Thomas Menino for 14 years. Her service includes founding two Boston community based organizations and national professional organizations, and service on six National Academy of Medicine study committees. She was elected to the Institute of Medicine in 2010. She has received over 50 awards including two honorary doctoral degrees in humane letters, the national Elizabeth Beckman Award for professors who inspire their students to change the world, and the American Public Health Association's 2015 Sedgwick Memorial Medal for Public Health Service. She currently serves as Associate Editor of American Journal of Public Health, the Board on Population Health of the National Academy of Medicine, and the Board of Research!America. She received her doctorate in psychology from the University of California, Los Angeles, in 1982.

Sergio Iniguez, Ph.D.

Sergio Iñiguez, Ph.D., is an Associate Professor in the Department of Psychology at The University of Texas at El Paso (UTEP). Dr. Iñiguez completed his bachelor's and master's degrees in psychology at California State University San Bernardino before completing the doctoral program in neuroscience at Florida State University. During his graduate training, Dr. Iñiguez used a variety of pharmacological, genetic, molecular, and behavioral methods to study the neurobiology of mood-related illnesses, using rodents as a model system. He joined the faculty at UTEP in 2016 where he has established a behavioral neuroscience laboratory that examines, at the preclinical level, how early-life exposure to psychotropic drugs and/or social stressors influence responses to mood-, addiction-, and memory-related behaviors in adulthood. Currently, NIGMS (National Institute of General Medical Sciences) financially support the research projects in his laboratory.



Luis A. Natividad, Ph.D.

Dr. Luis Alberto Natividad is a basic science research investigator studying the long-term effects of chronic drug and alcohol exposure on the brain. Natividad is a first-generation Mexican-American from El Paso, Texas. He obtained his undergraduate degree in Psychology from the University of Texas at Austin in 2002, and interned as a substance abuse counselor for adolescents in recovery. Aspiring to understand the basic mechanisms that drive addiction, he entered the Neuroscience program at the University of Texas at El Paso in the laboratory of Dr. Laura O'Dell. Here, he gained experience with behavioral and neurochemical techniques to study the consequences of adolescent nicotine exposure. Natividad received his doctorate in May 2012, and began his post-doctoral training at the Scripps Research Institute (La Jolla, CA) in the laboratory of Dr. Loren Parsons. He gained experience with novel biochemical approaches to further his studies of neuromodulators that influence anhedonic behaviors related to the "dark side" of addiction. Under the guidance of Dr. Marisa Roberto, he recently established a link between pathological anxiety and dysregulated endogenous cannabinoid signaling in the amygdala. Natividad has now expanded his research interests to include cognitive behavioral models that profile the emergence of impulsive and compulsive traits during protracted alcohol withdrawal. In collaboration with renown proteomics expert Dr. John Yates, Natividad plans to combine cutting-edge proteomic analyses of the prefrontal cortex with behavioral neuroscience approaches to elucidate novel mechanisms of alcohol-induced cognitive dysfunction.

Abstracts for Oral Presentations Wednesday 4 October 2017

THE PHOENIX FOOTPRINT

The Phoenix Footprint is a joint effort between community agencies from the Phoenix metropolitan area and leading scientists from Arizona State University. The Phoenix Footprint is a unique opportunity to highlight local assets while examining the needs of Hispanic and other minority/ under-served communities. During the day we will explore innovative strategies to prevent and/or reduce existing health disparities from the perspectives of the general community and the academic community. The goal of this four-part event is to leave a lasting imprint on communities throughout the Phoenix area and on NHSN members by stimulating discussions and initiating actions that aim to reduce health disparities affecting Hispanic and other under-served communities.

1:30 PM - 2:10 PM

COMMUNITY PANEL

The first of these events will feature a panel of leaders from community agencies. The aim of this panel is to present unmet needs and pressing issues affecting Hispanic and other under-served communities in areas of (1) alcohol, tobacco and other drugs; (2) HIV/AIDS; (3) mental health, and (4) obesity, diabetes, and other metabolic disorders.

2:15 PM - 3:00 PM

ROUNDTABLE DISCUSSION

The second event (Round Table Discussion) will be a debriefing on the content presented by the Community Panel. It will extend an opportunity to all conference attendees to engage in dynamic discussions on the challenges and potential solutions that can improve the well-being of Hispanic communities in areas of (1) alcohol, tobacco and other drugs; (2) HIV/AIDS; (3) mental health, and (4) obesity, diabetes, and metabolic disorders.

3:00 PM - 4:15 PM

SCIENTIFIC COMMUNITY PANEL

The third of these events will feature a diverse panel of researchers from Arizona State University. The aim of this panel is to present potential evidence-based solutions and potential contributions from basic science to the issues raised by the Community Panel. The fourth and final event will present a synthesis of the Phoenix Footprint and discuss some potential action items that aim to prevent and/or reduce health disparities affecting Hispanic and other under-served communities.

Thursday 5 October 2017

8:45 AM – 10:15 AM

NEW INVESTIGATORS IN DRUG ABUSE RESEARCH

Marisela Agudelo and Eden Robles

OVEREXPRESSION OF A STRESS PEPTIDE IN THE BRAIN SELECTIVELY INCREASES NICOTINE SELF-ADMINISTRATION IN FEMALE RATS - Kevin Uribe

Female rats display enhanced reinforcing effects of nicotine and heightened negative affective states produced by withdrawal as compared to males. Recent work has revealed that stress hormone systems within the local circuits of the nucleus accumbens (NAcc) modulate sex differences in the negative affective states produced by nicotine withdrawal. The present study expanded this work by examining the role of stress hormone systems in promoting the reinforcing effects of nicotine. This was achieved by comparing nicotine self-administration in female and male rats that received over-expression of the stress hormone, corticotrophin-releasing factor (CRF) in the NAcc. A group of ovariectomized (OVX) females were also included in order to examine whether our behavioral effects are ovarian-hormone mediated. Separate groups of rats received intra-NAcc infusions of the adeno-associated virus CRF (AAV-CRF) or a control vector (AAV-GFP). The animals were then prepared with a jugular catheter for extended access (23-hour) to self-administration of escalating doses of nicotine (0.015, 0.03, and 0.06 mg/kg/0.1 mL). Each dose was self-administered for 4 days with 3 intervening days of nicotine abstinence. The results revealed that over-expression of CRF in the NAcc produced an increase in nicotine self-administration in intact females as compared to males and OVX females. These findings suggest that stress systems in the NAcc play a key role in modulating sex differences in the reinforcing effects of nicotine. Also, the contribution of stress hormones to promoting the rewarding effects of nicotine is ovarian-hormone dependent.

CHANGES IN MIRNA SPECIES FOLLOWING LIFESTYLE INTERVENTION AMONG OBESE LATINO YOUTH WITH PREDIABETES. - Jamie Karch

Obesity and related health disparities including type 2 diabetes disproportionately impact Latino youth. These health disparities may be the result of gene-environment interactions, but limited research has examined these interactions in the pediatric age group. Lifestyle intervention is the cornerstone for preventing diabetes among high-risk populations and epigenetic and genetic factors may help explain the biological mechanisms underlying diabetes risk reduction following lifestyle changes. MicroRNAs (miRNAs) are small, non-coding RNA's that regulate gene expression and have emerged as potential biomarkers for predicting type 2 diabetes risk in adults but have yet to be applied to youth. Therefore, the purpose of this study was to identify changes in miRNA expression among Latino youth with prediabetes who participated in a 12-week lifestyle intervention focused on increasing physical activity and improving nutrition related behaviors. Whole blood collected at baseline and post intervention among 6 obese latino youth with prediabetes was processed using the PAXgene blood miRNA extraction kit. MiRNA concentration and integrity was measured using Nanovue. Next generation sequencing results of miRNA expression levels was quantified using programs CAP-mirSEQ and EdgeR. Secondary EdgeR analysis was used to determine significant expression level changes in miRNA at baseline and post intervention. A literary review using Pubmed was performed to identify past implications of significantly altered miRNAs. DIANA mirpath 3.0 pathway analysis was used to identify participation of significant miRNAs in KEGG pathways. In the selected population, improvements in glucose tolerance were observed as well as significant decreases in BMI, 2 hour glucose, fasting glucose, and increases in insulin sensitivity. From the next generation sequencing analysis, 368 miRNA's were identified of which, 22 were found to be significantly ($P<0.05$) altered in response to the intervention, 4 of which are novel (miR-6747-3p, miR-3127-3p, miR-4661-5p, miR-6783-3p) . Pathway prediction software revealed 17 of these miRNAs regulate 88 genes within the insulin signaling pathway. From the analysis, 22 miRNAs were found to have significantly altered expression levels following lifestyle intervention in obese, pre-diabetic Latino children. The preliminary results of this study suggest that alterations in miRNA's in response to lifestyle intervention are related to potential reduction in having or risk for type 2 diabetes, among adolescents with prediabetes. These results could shed light into the biological mechanisms underlying lifestyle-induced diabetes risk reduction in youth.

DESIGN AND IMPLEMENTATION OF A NOVEL APPROACH TO MEASURE FLAVORED WATERPIPE TOBACCO EFFECTS - Mayra Vargas-Rivera

While tobacco control has traditionally focused on cigarette smoking, waterpipe (a.k.a., hookah) smoking has dramatically increased worldwide. Waterpipe (WP) use is highly prevalent among United States (US) college students and has been

found to be greater among Hispanic students than those of other ethnicities. One of the factors thought to mediate this increase is the use of flavored waterpipe tobacco (a.k.a., Maassel), which is commonly used by young WP smokers. However, evidence on the effects of limiting flavored WP tobacco as a means to control or reduce WP use continues to be lacking. This novel research project will address this gap in knowledge by evaluating the influence of tobacco flavor on beginner and experienced WP smokers. Participants will be divided into 2 groups of WP smokers (72 each; total: 144) between the ages of 18-30 years old living in South Florida. Group 1 (beginners) will be defined as those who smoked ≤ 10 times in the past 6 months, while Group 2 (experienced) will be those who smoked ≥ 1/weekly in the past 6 months. Eligible participants will be randomized to complete 2 clinical visits that will include a WP smoking session with flavored or unflavored tobacco at a state-of-the-art research lab located at a large urban university. A brief medical exam, blood and urine samples to assess health, and structured survey questionnaires (measuring WP use, smoking urges/harm perception, and nicotine withdrawal) will also be completed at each visit. Outcomes that will be measured include: 1) pre- and post- smoking nicotine and exhaled carbon monoxide level; 2) puffing parameters; 3) cardiovascular measures; 4) subjective measures (WP satisfaction, dependence, harm perception) in low and high frequency WP users. This study will be the first to explore the effects of WP tobacco flavor manipulation on smokers' experiences, exposures, and puffing parameters. It will particularly provide novel information on: 1) the effects of flavor regulation on WP smokers at different stages of their smoking trajectory; 2) the development and maintenance of nicotine dependence; and 3) puffing patterns and toxicant exposure. This information will serve as a guide to the US Food and Drug Administration on the effects of WP tobacco use and aid in regulating flavored WP tobacco use. It will also provide insights that will help reduce health disparities involving Hispanic WP smokers.

DRUG USE AND SEXUAL RISK ASSOCIATED WITH HAVING SEX WITH MEN IN THE LAST 12 MONTHS AMONG MEN WHO USE METHAMPHETAMINE IN A MEXICO-U.S. BORDER CITY - Oralia Loza

Methamphetamine use is associated with sexual risk. Hispanic men who use methamphetamine, particularly men who have sex with men (MSM), are understudied. In 2014-2015, men over the age of 21 who use methamphetamine/"tachas"/crystal (METH) in the past three months and living in a Mexico-U.S. were recruited using convenience and snowball sampling. They were interviewed in Ciudad Juarez, Chihuahua Mexico on their experiences with METH and drug use, sex with other men, sexual risk behaviors including transactional sex, and health outcomes including self-reported HIV and Hepatitis C Virus (HCV) status. Men were categorized as men who have sex with men (MSM) if they reported a male sex partner in the past 12 months. Behaviors were compared between MSM and other men. Among the men who participated (n=100), median (Q1, Q3) age of participants was 29 (24, 37), 18% had sex with men in the past 12 months, and 30% at least once in their life. Median age of first use of METH was 18 (17, 23) and 12% indicated their reason for initiation was related to sex. Among MSM (n=19), 58% had also sex with women. Compared to other men, MSM had statistically significantly higher rates for receiving METH or money in exchanged for sex ever (63% vs 10%) or in the past 12 months (53% vs 7%), being penetrated during anal sex with last partner (32% vs 1%), ever having a same-sex partner in their life (100% vs 15%), and had higher rates of HIV infection (11% vs 1%) (p-values<0.05). In this border city, we did not find differences in METH and drug use patterns. Compared with other men who use METH, MSM engage in sexual risk behaviors at higher rates than other men placing them at risk of acquiring HIV and sexually transmitted infections. Appropriate interventions targeting Hispanic MSM who use METH are warranted.

UTEP Vulnerability Issues in Drug Abuse (VIDA) Project was funded by the NIH National Institute on Drug Abuse (1R24DA029989). Mentoring support came from the Interdisciplinary Research Training Institute (IRTI) Program at USC (R25 DA026401), also funded by National Institute on Drug Abuse.

10:15 AM - 11:45 AM

SCIENTIFIC SESSION 2

BRAIN MECHANISMS AND COGNITIVE CONTROL OF EATING: FROM MOLECULAR TO BEHAVIOR

Alicia Izquierdo

Socioeconomic factors, behaviors associated with lifestyle (such as diet and exercise), stress, and access to health care all contribute to the prevalence of diseases that disproportionately affect Hispanics. As an example, people of Hispanic and Latino origin are at higher risk for Type 2 Diabetes than non-Latino whites, and some scientists have attributed this to higher consumption of fats and artificial drinks containing high levels of refined sugar [1]. One alarming possibility is the capacity for highly palatable foods to engage the mesocorticolimbic dopamine system, a brain system important in learning about, predicting, and responding to rewards. Indeed, such palatable foods can promote craving and addictive behavior, or poor inhibitory control over consumption. Marketing strategies target certain subpopulations with cues that are associated with rewarding food experiences. What are the mechanisms for how the brain normally responds to cues that predict these foods? How do metabolic disorders impact the molecular pathways that support cognitive functions? How might we leverage what we know about the brain to mitigate problematic eating? In this panel, we will discuss the molecules and networks in the rodent and human brain that mediate cue-induced feeding, that support diet-induced changes in synaptic plasticity and cognition, and propose how executive functions may be bolstered to enhance the possibility of making better decisions about eating and diet.

A ROLE FOR STRIATAL ENKEPHALIN IN THE ABILITY OF FOOD-PAIRED CUES TO INCREASE MOTIVATION FOR FOOD REWARDS - Ian Mendez

It has been projected that by 2030 42% of the U.S. population will be clinically obese. One reported factor contributing to over-eating and obesity is a sensitivity to food associated cues and their ability to increase motivation to seek out food rewards. While opioid signaling has been long implicated in the hedonic impact of food rewards (i.e. food "liking"), more recent studies are now suggesting that the endogenous opioid peptide enkephalin, specifically within the striatum, may also be involved in the motivation to obtain food rewards (i.e. food "wanting"). Methods: To investigate the role of striatal enkephalin in cue-induced increases in motivation for food rewards, wildtype and striatum specific proenkephalin knockout (PENK KO) mice were trained and tested in the Pavlovian-to-Instrumental Transfer task. Results: No differences in associative or operant learning were observed between wildtype and PENK KO mice during training for the task. Importantly, when testing for the ability of cues previously paired with food to increase motivation for obtaining food, we found that wildtype, but not PENK KO mice, displayed a cue-induced increase in motivation. Conclusion: These findings suggest that enkephalin signaling within the striatum is necessary for the ability of food-paired cues to increase the "wanting" of food rewards. A better understanding of the neurocircuitry that underlies the hedonic and motivational aspects of feeding will advance the development of treatment strategies aimed at controlling aberrant feeding behaviors and reducing obesity.

DIET AND METABOLIC PRECONDITIONING OF BRAIN FUNCTION AND PLASTICITY - Fernando Gomez-Pinilla

Diet is one the most crucial needs for species survival and adaptation, and for maintaining overall health. I will discuss how diet builds resistance to neurological disorders by acting centrally and peripherally. Alterations in cell energy metabolism can be saved in the program of genes for considerable time. We are using fructose consumption as a model of metabolic perturbation, with detrimental effects on mitochondria bioenergetics, synaptic plasticity, and cognitive function, and aggravating the outcome of brain trauma. Fructose consumption affects hippocampal structural plasticity involving neurogenesis, myelination, and axonal growth. Using a systems nutrigenomics approach, we have found that metabolic perturbations carried by fructose promote selective transcriptomic and epigenomic alterations in the hypothalamus (control of metabolism) and hippocampus (critical for cognitive functions), affecting inflammation, immune response, neuronal signaling, and cognition. These molecular alterations in animal models converge with genes conferring genetic risks of metabolic and neuropsychiatric disorders in human genome-wide association studies. Furthermore, metabolic perturbations predispose the brain to the detrimental effects of brain trauma or other neurological disorders. Single cell analysis using drop-seq shows that the brain responds to the effects of TBI by coordinating the interaction between glia cells and neurons to maintain the energetic demands of the brain. We have found that early exposure to foods has a long-term impact on brain plasticity by building an "epigenetic memory" that provides resistance to neurological challenges. These studies are significant on the context of the health risk posed by the contemporary elevated fructose consumption on the current epidemic of metabolic and brain disorders.

TRANSCRANIAL DIRECT CURRENT STIMULATION (tDCS) OF THE DORSOLATERAL PREFRONTAL CORTEX AS A TREATMENT FOR OBESITY - Mary Boggiano

High rates of obesity and its disproportionate toll on minority populations calls for novel treatments. tDCS is a safe non-invasive neuromodulation technique found to reduce food craving and eating when targeting the right dorsolateral prefrontal cortex (DLPFC), especially with a right anode/left cathode (RA/LC) montage. However, no study has tested this montage in obesity or binge-eating disorder (BED), a high-risk factor for obesity. Therefore, we conducted two studies: one in overweight participants with BED and one in frank (non-binge-eating) obesity. Ethnically-diverse participants in both studies received 2mA tDCS and a sham session using the RA/LC montage over the DLPFC. Pre/post-stimulation wanting ratings of palatable food photos assessed craving and in-lab eating of premeasured M&Ms, Oreos, and potato chips assessed consumption. The preferred food was also recorded. A diary assessed binge variables for the BED study. Validated scales assessed baseline levels of cognitive and behavioral dieting traits, and eating for reward. Cognitive- and motor-type impulsivity scores were also obtained in the frank obesity study. Repeated-measures ANOVAs revealed that in the BED study: tDCS significantly decreased food craving, binge desire on the day of stimulation, and total and preferred kcals consumed by 11% and 17.5%, respectively, compared to sham. tDCS suppression of craving and eating was stronger in those who ate palatable foods less frequently for reward motives, and those with greater intent to restrict, respectively. In the frank obesity study: tDCS significantly reduced food craving in females and total and preferred-food intake in males by 5.2% and 13.3%, respectively. Intent to restrict calories but not actual restriction influenced tDCS craving suppression while attention- and nonplanning-type impulsivity but not motor impulsivity influenced tDCS eating suppression. Eating for reward had no effect. Together, the studies provide first proof-of-concept for tDCS to treat BED and frank obesity. The influence of cognitive over motor or reward traits on the tDCS outcomes supports activation of DLPFC-mediated cognitive control as a key neural and functional mechanism. That ethnicity had no differential effect on the outcomes bodes well for Hispanics struggling with BED and obesity to benefit from tDCS. Neuroplasticity via multiple-tDCS sessions should improve cognitive therapies for BED and yield safer and longer-lasting weight loss for obesity.

1:00 PM - 2:30 PM
SCIENTIFIC SESSION 3
JUST SAY KNOW: THE WALL BETWEEN CRIMINAL AND SOCIAL JUSTICE

Alice Cepeda

In our role as creators of knowledge, scientists are in position of great responsibility. As researchers studying psychoactive substances, those that take them, and the system under which both are controlled, our message can have a myriad of consequences. These can range from increasing public health through empirically-based treatments to lending support to policies that actually perpetuate racial inequality. Therefore, we have a special role in either promoting social justice or holding it back. The overall goal of this panel is to bring attention to the importance of avoiding data overinterpretation/misinterpretation, and of being empathetic towards the complexities of people's lives in order to ultimately achieve social justice. The following speakers will discuss how their work in the areas of neuroscience, community-based participatory action research and the criminal justice system play a role in this mission.

A CRITICAL EXAMPLE: PRENATAL CANNABIS EXPOSURE AND COGNITIVE FUNCTIONING - Ciara Torres

Despite limited data demonstrating pronounced negative effects of prenatal cannabis exposure, popular opinion and public policies still reflect the belief that cannabis is uniquely fetotoxic. One area of concern is subsequent cognitive functioning in those that have been exposed prenatally. We conducted a systematic and critical review of results from longitudinal studies examining the impact of prenatal cannabis exposure on multiple domains of cognitive functioning in humans. Statistically significant differences between prenatally exposed individuals and control participants were observed on a small minority of measures. The clinical significance of these findings appears to be limited because cognitive functioning of individuals prenatally exposed to cannabis overwhelmingly falls within the normal range of variability adjusted for age and education. This presentation uses the conclusions of this review as an example of the limitations, misinterpretations and overintepretations found in the literature on psychoactive substances. Finally, this data will be contextualized within the criminal justice system and social justice movements.

HEALTH DISPARITIES AMONG SEXUAL AND GENDER MINORITY HISPANICS/LATINOS: IMPLICATIONS FOR RESEARCH AND CLINICAL PRACTICE - Omar Martinez

Latinos are the fastest growing ethnic segment in the US, expected to grow 167% from 2010 to 2050, compared to 42% growth for the total U.S. population. Currently, Latinos make up 17% of the nation's total population, with projections that this number will nearly double to 30% by 2050. With growing health disparities among this group, the highest burden remains among sexual and gender minority Latinos. This presentation will provide a summary of the current empirical literature on health disparities, including substance and alcohol use, mental health, and HIV/AIDS among sexual and gender minority Latinos; identify gaps in research on substance use disorders, HIV/AIDS prevention and specific types of vulnerabilities faced by these communities; and present recommendations grounded on evidence-based prevention and treatment.

COLLATERAL SOCIAL AND HEALTH CONSEQUENCES OF INCARCERATION TRAJECTORIES FOR YOUNG ADULT LATINO DRUG USERS - Avelardo Valdez

Recent scholarship has documented the impact U.S. drug policies have had on the disproportionate rates of arrests, convictions and imprisonment of Latinos. Existing research has tended to overlook the long-term health and social consequences of incarcerated and post-release Latino men, many with persistent substance abuse disorders. This presentation focuses on data from a 15 year follow up study with young adult Mexican American men with histories of adolescent gang membership. Findings point to the impact long histories of serial incarceration have on access to social services and family system relationships, especially with partners, children and other close family members. Highlighted are the detrimental co-morbid drug use, physical and mental health consequences experienced by these men. Discussed are how these social and health disparities are exacerbated by the highly exclusive urban context in which they exist, intersecting with culture, social inequality, and hyper policing policies that target these young men.

2:45 PM - 3:30 PM
PLENARY PRESENTATION
NEURONAL DIVERSITY AND MULTILINGUAL NEURONS

Marisela Morales

Clinical observations and results from animal models indicate that dopamine neurons distributed within the ventral tegmental area (VTA) play a crucial role in the rewarding effects of drugs of abuse. Drugs of abuse influence the activity of dopamine neurons directly or indirectly (by influencing the activity of neurons that interact with dopamine neurons). Studies of VTA information processing have been focused on resident dopamine neurons for over fifty years and more recently on local inhibitory GABA neurons. However, we have provided evidence for the existence of glutamate neurons in the VTA, glutamate neurons that project in parallel to many of the same targets as the dopamine neurons. Moreover, we have found that a subpopulation of VTA neurons co-releases dopamine and glutamate and another subpopulation co-releases glutamate and GABA. While these discoveries indicate that the VTA is a unique complex brain structure, future studies are necessary to determine the messages encoded by the distinct VTA subpopulations of neurons in response to acute salient stimuli as well as in different behavioral states, and the changes in VTA activity and connectivity that contribute to drug addiction. Thus, the discovery of the unique complexity of the VTA neuronal composition and its complex connectivity offer new scientific challenges and opportunities towards having a better understanding of neuronal mechanisms underlying brain disorders related to the reward system.

3:15 PM - 4:15 PM BREAKOUT SESSION A
SESSION A1
ENGAGING HISPANICS AND ADDRESSING SUBSTANCE USE IN HIV PREVENTION AND CARE RESEARCH

Julie Levison

HIV infection disproportionately affects U.S. Hispanics, who comprise 17% of the U.S. population and 22% of new HIV infections. Challenges in curbing the HIV epidemic in Hispanics span HIV prevention and treatment. HIV risk factors lie at the nexus of biological and social vulnerability. Preventing HIV acquisition and improving engagement in HIV care, necessitates approaches that address the individual through societal levels (e.g. substance use, access to prevention and care services, cultural competency factors, underrepresentation in clinical research). Addressing these barriers in Hispanic populations is a necessary component of the UNAIDS goal of ending the HIV epidemic by 2030. The proposed panel will provide an overview of the state of the science of HIV prevention and care research for Hispanics and other populations affected by substance use from the laboratory and clinical trials to community and implementation research. The panel will also address opportunities and challenges across the HIV training and research pipeline.

HIV PRE-EXPOSURE PROPHYLAXIS AND FACTORS RELATED TO ADHERENCE TO HIV PREVENTION STRATEGIES - Victoria Ojeda

Dr. Ojeda's research focuses on substance use, HIV/AIDS, and mental health comorbidities, with a focus on Latinos. Dr. Ojeda will discuss HIV PrEP (pre-exposure prophylaxis and social factors related to adherence) in the context of clinical trials. As a fellow of the HIV Prevention Trials Network she will also discuss efforts within the HIV Prevention Trials Network to address disparities in HIV as well as support minority investigators involved in HIV prevention clinical trials. She is a member of the NHSN.

CHALLENGES AND OPPORTUNITIES TO OPTIMIZE ADHERENCE TO ART IN HISPANICS - Jose R. Castillo-Mancilla

Optimal adherence to antiretroviral therapy (ART) is critical to achieve and sustain viral suppression in persons living with HIV/AIDS. However, a large proportion of individuals still face challenges and barriers to achieve this goal. This is of particular importance for Hispanic individuals, who are disproportionately affected by HIV/AIDS and have historically demonstrated variable rates of ART adherence and virologic suppression. The social and biological factors that contribute to this variability are diverse and include access to health care, language proficiency, immigration status and substance use (among others), which have unique implications in each segment of this highly heterogeneous ethnic group. Thus, any intervention aimed at improving ART adherence among Hispanics should be tailored to meet the specific needs for each population. This presentation will focus on a) the challenges and consequences of suboptimal adherence in individuals living with HIV, including those that are specific to Hispanics and substance users; b) the evidence-based strategies that have been demonstrated to improve ART adherence, including their barriers and limitations to large scale implementation; c) new interventions that could beneficially impact ART adherence, including new antiretroviral delivery methods, feasible and acceptable real-time ART adherence feedback and personalized approaches in this population, and; d) developing a sustainable workforce of minority health-care providers and investigators focused on delivering culturally-sensitive HIV/AIDS care and engaging Hispanics into HIV-related research.

HIV TESTING, LINKAGE TO AND RETENTION IN HIV CARE IN LATINOS - Julie Levison

Achieving optimal HIV treatment outcomes and reducing HIV transmission requires diagnosis of HIV infection and for those who are HIV-infected, linkage to and consistent attendance in ongoing HIV care. HIV-infected Latinos experience barriers at each of these steps in HIV care. Nearly one-half of new HIV infections in Latinos are in immigrants. Migrant populations face an elevated risk for poor health outcomes. High levels of HIV-related stigma, social isolation, and "double discrimination" (HIV infection and migrant status) delay diagnosis and access to treatment in migrants in the US and Europe. In this session, Dr. Levison will review barriers to HIV testing particularly in Latino migrants with co-occurring substance use and mental health disorders, drawing from data from the multinational, NIDA-funded International Latino Research Partnership. She will also review emerging research on barriers to linkage to and retention in HIV primary care in Latino migrants and immigrants and interventions to address these barriers. She will address opportunities, challenges and solutions to supporting and retaining women and minority physician researchers in this area of research.

SESSION A2

ASK THE ACADEMIC JOURNAL EDITOR - Roundtable

Virmarie Correa-Fernández & Mayra E. Vargas Rivera

The frequent and quality dissemination of research procedures and findings through academic journals is an expected activity of scholars at different stages throughout their entire academic career: from graduate school to tenure professorship. For many, the publication of their work oftentimes feels like a puzzle and an event subject to luck. Additionally, few formal opportunities exist to obtain relevant and useful in-depth insights of the peer-reviewed process from the perspective of the journal editors, those individuals who initially determine an article "fit" with the journal's mission and who ultimately make decisions related to manuscript acceptance. As such, this breakout session aims to gather a group of panelists who had served as editors of scientific journals, who will provide relevant information and advice regarding the different stages of the editorial process of peer-reviewed articles. This session will address the most common issues and concerns faced by authors and will provide ample opportunities to ask questions related to the challenging decision-making process when submitting and revising a manuscript for publication. The session will also focus on considerations when submitting articles to journals targeting Latino/Hispanic health and/or drug abuse.

4:30 PM - 5:30 PM

BREAKOUT SESSION B

SESSION B1

NEUROSCIENCE DATABLITZ

Arturo Zavala

This breakout session will offer basic scientists the opportunity to share their exciting discoveries in the field neuroscience that expand our understanding of the brain, and of drug abuse and addiction. The goals of this breakout session are to highlight the latest work of basic scientists with the NHSN community; to provide an opportunity for discussion with other scientist with similar interests; and to facilitate the development of collaborations among NHSN members.

SESSION B2

U.S.-MEXICO BORDER REGION AS A RESEARCH TRAINING GROUND FOR GRADUATE STUDENT RESEARCH IN SUBSTANCE USE AND HEALTH DISPARITIES RESEARCH: TRAINEE PERSPECTIVES AND RESEARCH LEADERSHIP - Roundtable

Maria Luisa Zúñiga and Eden Robles

The next generation of substance use and health disparities researchers will discuss their perspectives on research training, mentorship and efforts to contribute to advancing science, especially among Latinos, binational populations and in a U.S.-Mexico border context. From the perspective of doctoral students, this roundtable session will provide trainee insights into how their programs are preparing them to advance research efforts to reduce the burden of substance use in the context of co-occurring conditions such as HIV, and reduce health disparities, especially among Latinos and transborder, mobile populations who may be at risk for poor health outcomes. Graduate students from UTEP's Latino Alcohol and Health Disparities Research Center will discuss their opportunities and challenges to conduct research with U.S.-Mexico border dwelling populations. They will provide an overview of three constructs within Latino health disparities research: acculturation, machismo/marianismo and the social context of the individual. Students will engage the audience by describing ongoing debates about these constructs and measurement considerations. They will discuss their training to move forward the field of health disparities and discuss the need for further consideration of how these constructs can inform improvements in health behavior theories and models (e.g., self-determination theory, stages of change transtheoretical model, etc.). Graduate students from the SDSU-UCSD Joint Doctoral Program in Interdisciplinary Research on Substance Use (JDP IRSU) represent a pioneering doctoral program to train the next generation of researchers in substance use prevention, harm reduction and treatment. They will discuss their training experiences and aspirations, and provide highlights of their ongoing substance use research with populations in the U.S.-Mexico border region. They will discuss what they have learned thus far about interdisciplinary collaborations and research approaches to alleviate burdens of substance misuse and addiction among Latinos, particularly in a border context. This panel will invite the audience to reflect critically on opportunities and challenges in substance use and health disparities research with Latinos and how mentors can best support and prep students to lead and serve as independent researchers and members of collaborative research teams.

Friday October 6, 2017

8:45 AM–9:45 AM

GRANT WRITING SESSION

TIPS FOR SECURING NIH-FUNDING TO CONDUCT INTERNATIONAL RESEARCH

Flavia Marsiglia

The panelist will describe success stories in obtaining NIH-funding for conducing international research. The panelist will share their tips, tricks, and lessons learned in how they were successful in securing NIH-funding for research in Mexico. The panelist will highlight the importance of creating meaningful international collaborations and other insights that have helped to advance their NIH-funded international research portfolio.

10:00 AM–11:30 AM

SCIENTIFIC SESSION 4

PROMOTING DIVERSITY IN THE SCIENTIFIC WORKFORCE PIPELINE

Laura E. O'Dell

There is an imminent need to identify challenges that limit minority representation in the scientific workforce. Identifying these obstacles is an important first step towards understanding the unequal representation of minorities at many levels of scientific training and funding realms. One possibility is that the factors that displace an aspirating scientist from the scientific research pipeline vary at different career stages. The following speakers will draw from their wealth experience to address various challenges faced at different levels of development and potential solutions for increasing diversity in the scientific workforce. The goal of the panel is to identify factors that might promote a successful career trajectory in hopes of capturing common themes for success. Dr. Laura O'Dell (Chair; University of Texas at El Paso) will provide opening comments and raise questions regarding the factors that may promote the development of successful drug abuse researchers from diverse backgrounds. She will also lead a discussion at the end of the panel to generate possible solutions for some of the identified obstacles. Dr. Lourdes Echegoyen (Speaker; University of Texas at El Paso, Director Office of Undergraduate Research Initiatives) is the leader of a major infrastructural award aimed at promoting undergraduate research opportunities. Her comments will focus on issues that arise early in the development of young scientists, and the ways in which early research experiences promote early entry into the scientific pipeline. Dr. Margarita Dubocovich (Speaker; Buffalo University, Dean for Diversity and Inclusion) has lead an array of training programs focused on promoting diversity in science. Her comments will describe the ways in which formal training programs can serve as formal mechanisms to promote success at the post-doctoral and early career levels. Lastly, Dr. Albert Avila (Director of the NIDA Office of Diversity and Health Disparities) will present current discrepancies in funding underrepresented minorities in science. He will also comment on NIH's efforts to promote diversity and speak to

some of the positive influences that have promoted the careers of early stage investigators.

DIFFERENT PATHS LEADING TO NIH GRANT FUNDING SUCCESS FOR EARLY-STAGE INVESTIGATORS - Albert Avila

Securing funding is critical in order for most scientists to sustain a successful and independent research career, however, navigating the NIH grant process can lead to crossroads, confusion, and for some, a grinding halt. The road to grant success and your first R01 may not take the traditional route, but you are not alone. This presentation will highlight how failure, determination, and grit are part of the winning formula to grant success for early-stage investigators. Funding disparities among underrepresented populations will be presented before exploring paths and opportunities leading to a Notice of Award. This presentation is ideal for pre-doctoral students, post-doctoral researchers, and junior faculty, who are pursuing an independent research career and have a general understanding of the NIH NRSA Fellowship and Career Development Award Programs.

ENERGIZING WORKFORCE EXCELLENCE BY BROADENING PARTICIPATION AND PROFESSIONAL DEVELOPMENT - Margarita Dubocovich

The Collaborative Learning and Integrated Mentoring in the Biosciences (CLIMB) Program at University at Buffalo (UB) was established as a mechanism to increase excellence in PhD and professional programs in the bioscience. CLIMB offers research opportunities, mentoring, and career and professional development to promote scholars develop into well-rounded professionals and leaders. The initial success of CLIMB's professional development and mentoring modules with PhD students, synergized the integration of these philosophies into a new initiative established in 2013, the UB's Institute for the Strategic Enhancement of Educational Diversity (iSEED). Through iSEED, we provide educational and professional development opportunities for students, junior scientists and faculty at seven UB schools in STEM scientific and healthcare disciplines with a strong emphasis in attracting underrepresent students. An undergraduate summer program (CLIMB UP) brings 25-30 students from diverse backgrounds to UB each year, with potential to enroll in advanced degree programs in all disciplines. This has positively impacted workforce development and diversity pipelines in all schools involved. These initiatives laid the groundwork for establishing pathways to various clinical and translational research programs resulting in the award of the prestigious Clinical and Translational Science Award (CTSA) and the CTSA-linked KL2 Mentored Career Development Program. As we expanded the CLIMB principles to include specific training to facilitate successful transitions from graduate school to postdoctoral positions, and from postdoctoral positions to faculty and careers in industry, it is expected these fellows will continue to "pay it forward" to promote learning at all levels through a lens of inclusive excellence.

Supported in part by the 2R25 GM095459-06, JSMBS funds, 3 E Fund Initiative from Office of the UB Provost.

THE ROLE OF UNDERGRADUATE RESEARCH PROGRAMS IN RETAINING AMERICA'S HISPANIC STEM TALENT - Lourdes E. Echegoyen

Diversity can be viewed from multiple perspectives such as cultural, racial, ethnicity, socio-economic, gender, age, sexual orientation, physical, and educational. To succeed at increasing the representation of Hispanics (a race-ethnicity factor) in US STEM fields, one should consider that all these factors interconnect and are influenced by other external factors. However, three such factors are the most influential. First, there is a cultural factor. Hispanics may have a common second language, but there are multiple differences among the various Hispanic groups when it comes to family dynamics and the historical background that influences their approach to life. Second, there is a socio-economic status factor. The lower it is, the fewer the opportunities young people have to be retained and complete degrees in STEM disciplines. Third, there are gender dynamics, which particularly for women are complicated by factors beyond the intersectionality of gender and ethnicity, such as the specific Hispanic cultural heritage and parental educational achievements. At the undergraduate level, research programs tend to focus on helping student develop technical expertise, professional development and a science/engineering identity. However, for our Hispanic population, programs must also focus on helping them overcome financial barriers, confront the impostor syndrome and deal with discrimination, biases and micro-aggressions. When programs ensure that mentors are well trained to address the difficulties their students face and involve family members in some key activities, the results can be phenomenal. Ultimately, the goal of retaining students and empowering them to succeed in STEM ensues. This discussion will touch upon some examples that seem to work.

2:15 PM–3:45 PM
SCIENTIFIC SESSION 5
EXPLORING HOW BASIC BIOLOGICAL SCIENCE INFORMS NOVEL TREATMENT AVENUES FOR ALCOHOLISM

Luis Natividad and Judith Arroyo

Present day challenges in the treatment of alcoholism include implementing novel clinical approaches to curb heavy drinking in diverse populations. In addition, the underlying neurobiological substrates that confer successful treatment and/or monitoring of progress in alcoholic individuals are not well defined, emphasizing the need for research programs that seek to bridge biological and clinical components towards the goal of reducing alcoholism rates. In this regard, Dr. Michael McDonell (Associate Professor, Washington University) will begin this discussion with his work using contingency management strategies in alcohol-dependent individuals from several Native American tribes. Dr. McDonell's work employs a novel biomarker (ethyl glucuronide) in a clinical intervention for alcohol use disorder with Native American participants. Next, Dr. Christina Lee (Assistant Professor, Northeastern University) will present clinical data on change talk, from a completed randomized trial delivering motivational interviewing (MI) In Spanish and in English to reduce hazardous drinking and negative consequences. Dr. Jon Houck (Assistant Professor, University of New Mexico, Albuquerque) will then offer a neurocognitive perspective of how MI works in the brain with his neuroimaging work in alcohol-abusing adolescents.

CONTINGENCY MANAGEMENT FOR ALCOHOL USE DISORDERS IN AMERICAN INDIAN AND ALASKA NATIVE COMMUNITIES: IMPLICATIONS FOR CONDUCTING RESEARCH IN DIVERSE COMMUNITIES - Michael McDonell

American Indian/Alaska Native (AI/AN) people have some of the highest alcohol abstinence rates compared to non-AI/ANs, but disproportionately suffer from alcohol use disorders and alcohol-related negative health outcomes. 50% of non-AI/ANs dropout of treatment with comparable or increased rates of attrition found among AI/AN people. Contingency management (CM) is an intervention in which reinforcers are provided 2-3 times each week for ~12 weeks for achieving alcohol abstinence. The aim of this NIAAA-funded randomized controlled trial is to investigate the effectiveness of CM for alcohol dependence among 400 AI/AN adults. 159 AI/AN adults were recruited from three locations: a rural-reservation, an urban clinic and an Alaska Native serving health care organization. AI/AN adults with alcohol dependence received treatment-as-usual and take part in a 4-week induction period where participants receive reinforcement for providing urine samples. Those with regular attendance and continued

alcohol use are randomized to treatment-as-usual and either a CM intervention group where reinforcement is provided for alcohol abstinence, assessed by ethyl glucuronide, or to a control group where reinforcement is provided for submitting urine samples 2 times each week for ~8 weeks. Participants continue to receive treatment-as-usual during a 3-month follow-up. We will describe the study method, methodological and practical challenges, as well as baseline characteristics and predictors of attrition during induction. Future research should continue to investigate whether higher rates of attrition among AI/AN people participating in treatment studies are due to practical reasons, clinically related or because of a lack of cultural acceptability of treatments.

MOTIVATIONAL INTERVIEWING CHANGE TALK IN SPANISH AND IN ENGLISH: FINDINGS FROM A RANDOMIZED CONTROLLED TRIAL TO REDUCE HAZARDOUS DRINKING
Christina Lee
The lack of Spanish-fluent providers is a known access barrier to addictions treatment. In 2001, the Department of Health and Human Services prioritized the provision of services in patients' preferred language, as central to improving standards for culturally and linguistically appropriate services (CLAS) in health care. Yet, there have been relatively few formal investigations reported, of what happens in the intervention "black box" when delivered in a different language. This presentation offers a unique examination of clinical audiotapes of motivational interviewing (MI) conducted in Spanish and in English, as part of a randomized clinical trial (R01AA021136, PI: Lee), to reduce hazardous drinking and negative consequences among Latino/as in the Northeast. Following Quality Assurance procedures (Miller & Rollnick, 2014), the MI audiotapes were all objectively rated to meet clinical competency thresholds established by the Motivational Interviewing Treatment Integrity rating system (Houck et al., 2013). Goals are to examine change talk in the different languages, and to examine whether language used in treatment delivery, differentially affects clinical outcomes. Attention to content and emotional tone in the expression of change talk will be explored. A future important area of investigation would be explore whether change talk in different languages activates different neural pathways. The data offers a first step towards that exploration.

EXAMINING RESPONSE TO ADDICTION TREATMENT WITHIN THE BRAIN - Jon M. Houck
Despite being one of the stronger evidence-based treatments for adolescent substance use disorders, effect sizes for motivational interviewing (MI) with adolescents are still in the small-to-medium range. Specific mechanisms of behavior change, including change talk, play an essential role in MI theory. However, few studies have examined the underlying brain mechanisms of change talk. The aim of this presentation is to review research findings on the role of change talk in the brain, and subsequent behavior change process. Improved instrumentation is needed to assess adolescent behavior change, and driving factors in the treatment response process, in clinical and research settings. Innovative methodology, including neuroimaging, may help identify relationships between active treatment ingredients and treatment response.

4:00 PM - 5:30 PM
SCIENTIFIC SESSION 6
FRONTIERS PANEL: A PERSPECTIVE OF LATINO DRUG ABUSE RESEARCH FROM A VETERANA TO THE NEXT GENERATION OF SCIENTISTS
Alice Cepeda
In keeping with this year's conference theme, the present panel will explore the state of Latino drug abuse science from a historical, current and future perspective. The panel brings together three scientists composed of a national and internationally recognized drug abuse scientist. This "veterana" scientist will provide a framework for understanding some of the pioneering work in the field and how far we have come to understand the disproportionate impact of drug use among Latinos in the U.S. The other two panelists represent the future of Latino drug abuse research. The panelists will present findings from their own research that reflects new, cutting edge and scientifically innovative science. This will provide insight into "what's next" for the field and how can we go beyond what we already know from the previous generations of science and scientists.

PEOPLE, PLACES AND DATA: A GUIDED TOUR THROUGH A HISTORICAL SLICE OF LATINO DRUG ABUSE RESEARCH - Hortensia Amaro
Since the late 1970's, the science of substance use and substance use disorders has grown by leaps and bounds. The development of this knowledge base has provided a more nuanced understanding of the biological, psychological and sociological dimensions of drug use and drug use disorders. Within this broader context, there have also been advances in our understanding of substance use among Latino populations. Such gains were often achieved in the face of great reticent or lack of enthusiasm by the mainstream drug abuse research community. Nevertheless, key veteranos fought those early battles and paved the way for many of us and subsequent generations of Latino scientists. This presentation offers one "young" veterana's brief tour through a selected historical slice of Latino drug use research. In life as well as in science, it is wise to be well-grounded in one's history and to take stock of progress to more clearly envision the road ahead.

JUVENILE EXPOSURE TO ANTIDEPRESSANT MEDICATIONS ALTERS PREFERENCE FOR COCAINE IN ADULTHOOD - Sergio D. Iñiguez
Substance abuse disorder and mood-related illnesses, such as major depression, often co-occur. Thus, it is likely that overlapping neurobiological mechanisms underlie their etiology. Interestingly, the initiation of substance use/abuse, as well as the first incidence of depression, begins in the adolescent stage of development. Consequently, there has been an increase in the prescription rates of antidepressant medications to the juvenile population. This is surprising, given that the long-term neurobehavioral consequences of exposure to psychotropic drugs, during early development, are not well understood. Thus, to address this issue, the laboratory of Dr. Iñiguez examines how early-life exposure to antidepressants influence reactivity to drugs of abuse, using animal models. Specifically, he will be presenting preclinical data indicating that adolescent exposure to both traditional (fluoxetine) and novel (ketamine) antidepressants results in behavioral alterations to the rewarding properties of cocaine, in adulthood. Lastly, the translational implications of these data to the psychopharmacology field, as well as the importance of including diverse populations in the clinical research setting, will be discussed.

DYSREGULATION OF ENDOGENOUS CANNABINOID TONE IN THE CENTRAL AMYGDALA CRITICALLY UNDERLIES THE CO-MORBID EXPRESSION OF ANXIETY AND ALCOHOL DRINKING - Luis Natividad
Alcoholism is often co-diagnosed with psychiatric mood disorders. These observations have prompted the "self-medication" hypothesis, suggesting that alcohol may be used in part to gain relief from negative emotional states. Emerging clinical research suggests Latinos (more specifically, Mexican-Americans) may exhibit increased susceptibility to co-morbid disorders that influence alcohol consumption, particularly under conditions of enhanced stress and anxiety. Despite the association, there is much to be learned about the basic mechanisms that influence co-morbid pathologies. Using a genetically-selected rodent line (i.e., Marchigian Sardinian P rats) displaying innate symptoms of behavioral anxiety and excessive alcohol intake, we identified dysregulated signaling

properties of the endogenous cannabinoid (eCB) system that normally suppresses the effects of stress. Specifically, we found evidence of an overactive eCB clearance enzyme, fatty acid amide hydrolase (FAAH), in the amygdala region involved in the processing of fear and anxiety. Upregulated FAAH contributed to the increased breakdown of the major eCB anandamide, thus reducing inhibitory control of stress-sensitive circuits in the central nucleus division. Subsequent studies isolated regions of the amygdala to evaluate the therapeutic capacity of FAAH inhibitors to alleviate symptoms of co-morbidity. The tempering of hyper-stress function, anxiety-like behavior and excessive alcohol intake suggests that critical areas of the amygdala are associated with innate deficiencies in anandamide signaling, and may underlie the co-morbid influence of mood symptoms that exacerbates alcohol drinking. The findings are discussed in terms of deficient gating mechanisms of anxiety, and downstream implications of the "self-medication" model that increase the likelihood of developing alcohol use disorders.

Poster Abstracts
Wednesday October 4, 2017
4:00 PM - 5:30 PM POSTER SESSION

1. Miriam J. Alvarez, S*. Oviedo Ramirez; G. Frietze; C.A. Field; M.A. Zárate; The University of Texas at El Paso (mjalvarez2@miners.utep.edu)*

MYTH VS. REALITY: THE EFFECT OF LATINO ACCULTURATION ON ALCOHOL USE AND INTIMATE PARTNER VIOLENCE.

Background. Given the high frequency use of acculturation measures in research pertaining to Latino populations, an analysis of the effect of acculturation on health is warranted. The present study assessed the predictive utility of acculturation as a predictor of alcohol use and intimate partner violence. Methods. Two separate studies were conducted to provide an in-depth review of the predictive utility of acculturation as a predictor of alcohol use and intimate partner violence among Latinos. For each study, two main analyses were conducted – a p-curve analysis and a meta-analysis. A p-curve tests the distribution of statistically significant p-values for a set of studies to establish evidential value (Simonsohn, Nelson, & Simmons, 2014). The objective of the meta- analysis was to examine the effectiveness of various acculturation measures in predicting alcohol use and intimate partner violence outcomes in Latinos. Results. Results demonstrated that acculturation is a statistically significant predictor of alcohol use Z=-20.75, p<.0001. A Random Effects Model (REM) yielded a weighted average correlation of 0.16 (95% CI = 0.12 - 0.19). Regarding intimate partner violence, acculturation is a statistically significant predictor of intimate partner violence Z=-15.26, p<.0001. A Random Effects Model (REM) yielded a weighted average correlation of 0.17 (95% CI = 0.06 - 0.28). Conclusions. This review addresses the critical knowledge gap that exists in regards to understanding mechanisms involved in cultural adaptation and how they impact health behaviors. Altogether, the assumption is that acculturation predicts behavior. Our analyses reveal that the association between acculturation and our targeted health behaviors is relatively small. We recommend future studies assess the validity of current acculturation measures in research pertaining to Latinos and other immigrants. Moreover, further development of acculturation constructs is necessary to inform the development of new measures that better predict behavior. Better predictive utility may assist both researchers and policy makers as a way to enhance the development, implementation, and evaluation of health interventions for Latinos and other immigrants.

2. Arthur "Trey" Andrews III, A*ndrews, A.R., University of Nebraska-Lincoln; López, C.M., Medical University of South Carolina; Saunders, B., Medical University of South Carolina; Kilpatrick, D.G., Medical University of South Carolina; (arthur. andrews@unl.edu)*

MEDIATIORS OF VIOLENCE EXPOSURE DISPARITIES FOR HISPANIC YOUTH

Hispanic youth experience significant disparities in violence exposure compared with White youth (e.g., Andrews et al., 2015), but the mechanisms for these disparities are unclear. Disparities in initial violence exposure may perpetuate further disparities, as initial violence exposure increases the risk of subsequent violence exposure (e.g., Cisler et al., 2012). Violence exposure may also reciprocally increase the risk of mental health concerns, such as posttraumatic stress disorder (PTSD) and delinquency (e.g., López et al., 2016). The current study examined prior violence exposure, PTSD, and delinquency as longitudinal mechanisms of disparities in exposure to violence using National Survey of Adolescents-Replication data (NSA-R; Kilpatrick et al., 2005). The NSA-R is a national, random sample of adolescents between ages 12 and 18. The 2,755 youth who identified as Hispanic (n

= 409, 14.8%) or White (n = 2,346, 85.2%) were included in the current analyses. The NSA-R utilized a highly-structured interview assessing violence exposure (e.g., physical assault victimization), DSM-IV PTSD criteria and several forms of delinquent behavior (e.g., physical assault perpetration). Two waves of follow-up interviews were conducted approximately one year apart. Cross-lagged and autoregressive path analyses examined violence exposure differences. Results suggested that Hispanic youth experienced greater violence exposure than white youth across all waves (p-values < .001) and Wave 1 differences in violence exposure mediated disparities in violence exposure in subsequent waves (p-values < .05). Baseline violence conferred more risk of subsequent violence exposure for Hispanic youth than for white youth (p-values < .05). PTSD and delinquency also partially mediated the risk of additional violence exposure reported during Wave 2 (p-values < .05), but not at Wave 3 (p-values > .05). Finally, violence exposure did not appear to account for disparities in PTSD or delinquency at Wave 2 or Wave 3 (p-values > .05).

The present study suggests that Hispanic youth face significant disparities in the mechanisms that increase the risk of violence exposure. Notably, violence exposure appears to increase the risk of future victimization even more for Hispanic youth compared with White youth. Thus, trauma prevention efforts may need to focus on specific mechanisms for Hispanic youth in order to address violence-related disparities.

3. Donovan A. Argueta, *Nicholas V. DiPatrizio, Division of Biomedical Sciences, University of California Riverside School of Medicine (donovanargueta@gmail.com)*

ENDOCANNABINOIDS IN THE GUT CONTROL RELEASE OF SATIATION PEPTIDES

The peripheral endocannabinoid (eCB) system has gained recent attention for its role in controlling food intake and energy balance. We reported that tasting dietary fats – but not other macronutrients – increased production of the eCBs in jejunum of rats through a mechanism that required an intact vagus nerve, and inhibiting this local signaling event with peripherally-restricted cannabinoid CB1R antagonists blocked sham feeding of fats. Fasting for 24 h was also met with increased production of jejunal eCBs through a cholinergic-dependent mechanism, and inhibiting production of eCBs or their actions at peripheral CB1Rs blocked refeeding after a fast. Furthermore, we recently reported that eCB levels in jejunum epithelium and blood were up-regulated in a mouse model of western diet-induced obesity, and inhibiting peripheral CB1Rs completely blocked associated hyperphagia (i.e., increased meal size, rate of feeding, and caloric intake). Collectively, our studies suggest that orexigenic eCB signaling in the gut is driven by cholinergic neurotransmission under several behavioral and metabolic conditions, and may participate in the development of diet-induced obesity. The specific mechanism(s) by which gut-derived eCBs communicate with the brain to influence food intake remain unknown. We tested the hypothesis that eCBs control release of the satiation peptide, cholecystokinin, which is produced in upper small intestinal-epithelium and regulates meal size by activating the afferent vagus nerve. Administration of the peripherally-restricted CB1R inhibitor, AM6545, significantly decreased western diet intake, and increased circulating levels of CCK-8. The functional significance of our results are currently under investigation; however, they suggest that eCB signaling in the upper small intestine drives hyperphagia by a mechanism that includes inhibiting release of gut-derived satiation peptides.

4. F. Maria Bercum, *J. Ayers, K.L. Agster, K. McConomy, S. Livitz and M.P. Saddoris. University of Colorado Boulder (florencia.bercum@colorado.edu)*

DISTINCT CUE ENCODING AND BEHAVIORAL IMPAIRMENTS ASSOCIATED WITH INHIBITION OF THE NUCLEUS ACCUMBENS SHELL. IMPLICATIONS FOR COCAINE ADDICTION

Cocaine addiction is a chronic disorder characterized by compulsive drug taking followed by abstinence and relapse. Addicted individuals often attempt to break this cycle yet, drugs of abuse induce persistent dysregulation of mesocorticolimbic circuitry that disrupts motivated behaviors. The nucleus accumbens shell (NAcSh) displays impaired neural signaling following chronic cocaine self-administration in rodents. For example, following a 30-day abstinence period, neural encoding in this area fails to track reward-relevant cues and actions in a Pavlovian-to-Instrumental Transfer task relative to NAc core. Similarly, they show impairments in learning second-order associations and conditioned approach behaviors. These findings suggest that NAcSh encoding impairments are correlated to these behavioral deficits, though it is not known whether altered neural encoding and impaired behaviors are causally linked.

To directly address this question, we used inhibitory DREADDS (AAV-hSyn-hM4Di-mCherry) to silence NAcSh neural activity during first-order cues predictive of a food reward. Rats learned one pair of Pavlovian associations (CS+Sal ↘ food; CS-Sal ↘ nothing) on days in which they received a saline vehicle injections, and a different pair of stimuli (CS+CNO ↘ food; CS-CNO ↘ nothing) on days in which they received CNO injections, allowing the comparison of encoding within subjects and across days. Electrophysiological recordings from NAcSh neurons enabled the characterization of the effects of CNO-related changes in firing relative to saline days. We have found that DREADD inhibition impairs conditioned approach during CS+ cues, mirroring the effects of cocaine. Additionally, phasic activity to motivationally-salient stimuli is impaired, including associative encoding for cues, as well as phasic alterations in conditioned approach to the food cup and approaches to the cues. The present investigation recapitulates previously-reported alterations in NAcSh cue encoding during withdrawal from cocaine self-administration, suggesting that NAcSh dysfunction is causally related to cocaine-related deficits in associative behaviors.

5. Chris Bolden, *Chuck Hay, Laura Ewing, Kennede McLeroy-Charles, Eric Peterson, University of Arkansas for Medical Sciences, Little Rock, Arkansas (CBOLDEN@uams.edu)*

CHARACTERIZING THE NEUROPROTECTIVE POTENTIAL OF ANTI-METHAMPHETAMINE GENE THERAPY

Methamphetamine (METH) is a highly addictive neurotoxic psychostimulant, with no FDA-approved pharmacological treatment options. METH causes dopaminergic terminal damage and pro-proinflammatory cytokine production leading to neuroinflammation. Evidence suggests that neuroimmune factors such as cytokines contribute to METH addiction by causing severe structural and functional changes in areas of the brain associated with emotion and memory. These unregulated pro-inflammatory effects eventually lead to neurodegeneration in the user after a prolonged inflammatory state, thus novel targeted treatments that focus on mitigating these effects should be evaluated. A novel treatment under evaluation in our laboratory is the use of anti-METH single chain variable antibody-fusion fragment (7F9-Fc) packaged into adeno-associated virus (AAV) particles. 7F9-Fc work as a pharmacokinetic antagonist to slow and reduce entry of METH into the brain. AAV-7F9-Fc has achieved long-term serum concentrations in mice (>7 months from a single dose) and has been shown to alter locomotor effects of METH in mice. Thus, this treatment has the clinical potential to attenuate the effects of METH during drug use and aid in long-term addiction recovery, and alleviate monthly compliance issues associated with rehabilitation. These treatments could also significantly decrease neuroinflammation brought on by periodic relapse to METH use during rehabilitation. We hypothesize that AAV delivered anti-METH antibody fragment (AAV-7F9-Fc) will provide extended protection from METH-induced neuroinflammation. To begin to test this hypothesis, we are establishing a mouse model of METH-induced

neuroinflammation in our laboratory. We conducted a study to measure markers of glial cell activation, glial fibrillary acidic protein (GFAP), ionized calcium binding adaptor molecule (Iba1) and proinflammatory cytokines tumor necrosis factor-α (TNF-α), Interleukin-1β (IL-1β), and Interleukin-6 (IL-6) via Quantitative-PCR (qPCR) after METH administration. BALB/c mice were divided into six treatment groups (n=5/group); 1) Saline + Saline, 2) Saline + METH, 3) LPS, 4) AAV-7F9-Fc + Saline, 5) AAV-7F9-Fc + METH, 6) AAV-empty vector + saline. METH administration followed a novel dosing regimen for chronic neuroinflammation – 1 mg/kg i.p. for seven consecutive days. Our results indicate that this dosing regimen lead to a significant increase in proinflammatory mediators in the frontal cortex and hippocampus.

6. Tara Bautista, *Arizona State University, College of Nursing and Health Innovation; Hortensia Amaro, University of Southern California, School of Social Work; (tara.bautista@asu.edu)*

ACCEPTABILITY OF A MINDFULNESS-BASED RELAPSE PREVENTION INTERVENTION AMONG A DIVERSE SAMPLE OF WOMEN

Approximately 25 million Americans struggle with substance use disorders (SUD) annually. While effective treatments exist, over half of those who enter treatment for SUD drop out and relapse. One approach to reducing treatment dropout and relapse is mindfulness-based relapse prevention (MBRP). Although efficacy trials are promising, some have questioned the intervention's fit and acceptability for diverse race/ethnic women. Amaro et al. developed a MBRP adaptation for diverse race/ethnic women with SUD and trauma history. The purpose of the present study is to assess the acceptability (the degree to which participants find the treatment to be feasible, relevant, and appropriate) of this MBRP adaptation. The sample consists of 100 women randomized into the MBRP or attention control conditions. Acceptability within the MBRP group was assessed using a 17-item satisfaction questionnaire measured on a scale from 1 to 5 at session 2 and 11, and a mindfulness practice questionnaire containing 16 Taraitems assessing formal practice and 15 items assessing informal practice measured on a scale from 1 to 5 at sessions 3, 6, 9, and 12. The Applied Mindfulness Process Scale (AMPS) was used to assess uptake of applied mindfulness practices in stressful situations that could lead to relapse. Open-ended responses at weeks 2 and 11 captured participant opinions and experiences in the intervention. Preliminary results indicate high satisfaction at session 2 (M=4.11, SD= 0.53) and session 11 (M=4.38, SD = 0.44). Last-week use of formal mindfulness practices (e.g., sitting or walking meditation) ranged from 68% to 100% and use of informal practices (e.g., Triangle of Awareness, STOP Light Technique) ranged from 77% to 100%. AMPS scores increased from session 3 (M= 36.97, SD=10.31) to session 12 (M=39.5, SD= 11.01), suggesting increase use of applied mindfulness practices during stressful times. Open-ended responses were positive noting specific skills and the value that participants experienced. We found no race/ethnic differences. These preliminary findings suggest that the adapted MBRP is acceptable and useful by diverse women in residential SUD treatment. Our future work focuses on assessing the intervention's acceptability across clinical severity profiles and by time in treatment. We are also pursuing research on the underlying factors of acceptability, which could lead to improvement of acceptability measurement.

7. Tara Bautista, *B. Suh & F.G. Castro, Arizona State University, College of Nursing and Health Innovation (tara.bautista@asu.edu)*

RELATIONSHIP BETWEEN COGNITIVE COMPLEXITY AND EMOTIONAL EXPRESSION IN MALES WITH SUBSTANCE USE DISORDER

Extensive drug use is associated with difficulty in expressing emotion. Cognitive Complexity (high-ordered thinking), however, is an important skill that can aid in emotional expression and has not gained attention in the previous literature. This sample consists of 28 males with SUD, ages 23-60 (M=40.14, SD=10.20). The larger sample of 84 cases was stratified by levels of Cognitive Complexity and 14 cases were selected from "highest Cognitive Complexity" and "lowest Cognitive Complexity" groups. These contrasting groups did not differ significantly by age, ethnicity, or severity of polydrug use. Integrative Mixed Methods methodology was used to conduct thematic coding of "Clarity of Emotional Expression." Thematic categories were generated inductively through narrative responses to a focus question asking about feelings related to their most difficult life problem in the past five years. Two independent coders conducted this thematic coding. In this analysis, participants' overall "Levels of the Clarity in Emotional Expression" were rated on a scale of 0 (no response), 1 (low clarity), 2 (medium clarity), or 3 (high clarity). The inter-rater reliability rating for this scale was high (kappa >.8).

An independent-samples t-test compared the Clarity of Emotional Expression on high and low Cognitive Complexity. These groups differed significantly, low Cognitive Complexity (M=1.93, SD=.99) versus for high Cognitive Complexity (M=2.79, SD= .67); t (26), p=.01. The qualitative analysis uncovered dominant emotional themes within each group. In the low Cognitive Complexity group, the dominant theme was "express feelings in inconsistent/conflicting/confusing ways" which was mentioned by 50% of participants. The dominant theme from the high Cognitive Complexity group was "express complex emotions" which was mentioned by 35.71% of participants. These findings suggest the males with SUD and high Cognitive Complexity exhibit a higher Clarity of Emotional Expression than those with low Cognitive Complexity. This indicates the utility of treatment efforts to increase Cognitive Complexity among drug dependent males in an effort to enhance their Clarity of Emotional Expression which could promote recovery and decrease cravings and relapse.

8. Bin Suh, *T. Bautista, & F. G. Castro Arizona State University College of Nursing and Health Innovation (BSUH2@ASU.EDU)*

FAMILY SUPPORT AND PHYSIOLOGICAL HEALTH MEASURES AMONG LATINOS AND LATINAS AT RISK FOR DEVELOPING TYPE 2 DIABETES

The importance of family support for effective self-management of Type 2 diabetes (T2D) mellitus has been emphasized in the literature. The present study assessed how different types of family support influenced diet and exercise and the relationship with physiological indicators of health among pre-diabetic adult Latinos and Latinas. The study sample consisted of 35 Latino American participants, ages 22 to 65 (M = 37.57, SD = 11.19), who are at risk of developing T2D. The majority of the sample (71.4%) identified as an immigrant, with length of residence in the United States ranging from 4 to 25 years (M = 13.22, SD = 7.31). The Integrative Mixed Methods methodology thematic coding was utilized to inductively identify conventional types of family support (i.e., Informational, Instrumental, and Emotional). The emergent themes from narrative responses were used to create thematic categories regarding the participants' perception of the manner in which their family supported or impeded their healthy diet and exercise efforts. Physiological measures were gathered to assess diabetes-related health status, including: body mass index (BMI), glycosylated hemoglobin levels (HbA1c), total cholesterol, and fasting blood glucose levels. A correlation analysis was conducted to examine associations between the types of support and physiological measures. The themes of "No Family Support" (31.4%) and "Instrumental Support" (31.4%) were the most common regarding diet. "No Family Support" (28.6%) was also the most common theme for exercise. "Informational Support" for diets was inversely correlated with total cholesterol, r = -.348, p = .020. The "Informational Support" for exercise was inversely related to BMI, r = -.289,

p = .046. Higher fasting blood glucose level was positively correlated with "No Family Support" for exercise, r = .335, p = .025, and negatively correlated with "Instrumental Support" for exercise, r = -.289, p = .046. "Emotional Support" for exercise was inversely correlated with total cholesterol, r = -.330, p = .026. A lack of family support was associated with several adverse health states as measured by specific physiologic health measures. This suggests the importance of increasing family support as a protective intervention among Latinos and Latinas who are at risk for T2D. Future analysis should assess family support differences between Latinos and Latinas.

9. Miguel Angel Cano, *Florida International University; M. Sanchez (FIU), P. Rojas (FIU), D. Ramirez-Ortiz (FIU), K.L. Polo (FIU), J. Servian (FIU), E. Romano (Pacific Institute for Research and Evaluation), & M. De La Rosa (FIU) (mcanojr@fiu.edu)*

ASSOCIATIONS OF FAMILY COHESION AND SOCIAL SUPPORT WITH ALCOHOL USE SEVERITY AMONG ADULT HISPANIC IMMIGRANTS

To date alcohol research among adult Hispanic immigrants has been historically scarce. Therefore, more etiological studies are needed among this population to identify and understand modifiable determinants of alcohol use behavior to better inform the design and modification of evidence-based interventions targeting alcohol use. As such, this study aimed to examine if social support mediated the association between family cohesion and alcohol use severity among adult Hispanic immigrants living in the United States. A mediation analysis was conducted on a cross-sectional sample of 411 participants from Miami-Dade County, Florida. The mediation analysis indicated that higher family cohesion was directly associated with higher social support (β = .45, p < .001) and lower alcohol use severity (β = -.14, p < .01). Higher social support was also directly associated with lower alcohol use severity (β = -.11, p < .05). Furthermore, the indirect association of family cohesion on alcohol use severity was statistically significant (β = -.05, p < .05). Lastly, results from the mediation analysis indicate that all predictor variables in the model accounted for 14.33% of the variance of alcohol use severity [ΔR2 = 14.33, F(9, 401) = 7.45, p < .001]. This study adds to the field of research on alcohol use behavior among adult Hispanic immigrants. Potential clinical implications are that strengthening family cohesion may result in lower alcohol use severity because it enhances levels of social support.

10. Luis M Carcoba, *R.J. Flores; L.E. O'Dell, Department of Psychology, University of Texas at El Paso, El Paso, TX USA (lmcarcoba@utep.edu)*

EXAMINATION OF THE NEUROCHEMICAL MECHANISMS THAT MODULATE SEX DIFFERENCES IN NICOTINE WITHDRAWAL

Women are more vulnerable to tobacco use than men and experience greater symptoms of withdrawal during abstinence from nicotine in tobacco products. However, the neurochemical mechanisms that mediate sex differences in nicotine withdrawal are not well understood. Current work in our laboratory is focused on understanding the underlying neural circuitry of withdrawal within the nucleus accumbens (NAcc), where dopamine levels are decreased during withdrawal from nicotine. Our mechanistic hypothesis is that females display larger decreases in dopamine levels in the NAcc that are modulated via a greater gamma-aminobutyric acid (GABA)-mediated inhibition of dopamine in this region. To address this hypothesis, we assessed NAcc levels of GABA during nicotine withdrawal in male and female rats. Rats also received yohimbine to compare sex differences in response to a pharmacological stressor. Rats were prepared with an osmotic pump containing a dose of nicotine (3.2 mg/kg; base) that produces equivalent nicotine levels in female and male rats. Fourteen days later, the rats were prepared with dialysis probes in the shell of the NAcc. The following day, samples were collected every 20 min for a 1-hour period following baseline and administration of the nicotine receptor antagonist mecamylamine (1.5 and 3.0 mg/kg, ip) to precipitate withdrawal. During nicotine withdrawal, females displayed a significantly larger increase in GABA release than males. Similarly, females displayed a larger increase in GABA release in response to administration of the pharmacological stressor, yohimbine. Our results suggest that females display larger withdrawal-related increases in GABA release than males. This provides evidence for a potential mechanism involving GABA mediated sex differences in nicotine withdrawal. In addition, we are employing mass spectrometry methods assess the relationship between GABA and other neurotransmitters that may mediate sex differences in nicotine withdrawal.

11. Kenia Carrera, *M. Mechammil; G. Lockhart; R. A. Cruz. Utah State University, Department of Psychology (kenia.carrera@aggiemail.usu.edu)*

ARE CULTURAL AND FAMILIAL FACTORS ASSOCIATED WITH LATINO YOUTH SELF-REGULATION?

A large body of psychological research, focusing mostly on European American youth, has indicated that variability in adolescents' self-regulation influences their early substance use (SU). At this time, there is a dearth of research focused on understanding Latino youth self-regulation. We also know that Latino youth SU risk is associated with cultural and familial factors, such as family obligations and parent-child relationship quality. Yet we know very little about the ways in which cultural and familial factors may intersect with Latino youth self-regulation. This ongoing pilot research aims to examine whether family and cultural factors are associated with self-regulation abilities in Latino youth. The Choices Youth Health Pilot Study collected data from Latino youth (N = 50) ages 13-17 in Northern Utah. Inclusion criteria included that youth were comfortable answering questions in English and that they identified as Latino/Hispanic. Participants were recruited through community advertisements and snowball referrals. The study consisted of a 1.5-hour home interview including questionnaires, a behavioral task and salivary data collections. Parental consent and youth assent were required, and this study was approved by the Utah State University Institutional Review Board. This initial data analysis tested bivariate correlations between self-reported questionnaire measures of self-regulation abilities, family relationships, and cultural orientation. Our initial results suggested that higher youth report of family obligations was associated with higher impulse control (r =.281, p=.048). In addition, youth report of higher bonding with their mother was associated with lower impulsivity (r =-.337, p=.02), and lower self-regulation problems in the face of high positive emotion (r =-.335, p=.048). Our initial results indicated that higher family obligations and positive parent-child relationships may be associated with better self-regulation among Latino youth. This pilot study is limited by a small sample size, and relatedly, infrequent SU behavior (~10%). Still, this study sets the groundwork for future research. Specifically, we are currently collecting data from an additional 100 Latino youth ages 13-17 in Northern Utah, which will be added to follow-up data analyses. This research has the potential to inform our understanding of Latino youth SU as influenced by cultural, familial, and individual factors.

ry field. The 100 most frequently cited papers were selected to evaluate their bibliometric parameters including publication year, journal, authors, countries and times cited. The 100 top-cited papers were published during the period 1952 to 2009, being 73% from 1990 to 2009. The most cited article was published in 1991 and entitled "The Fagerstrom test for nicotine dependence-A revision of the Fagerstrom tolerance questionnaire". The papers were published in 17 journals. Addiction published 29 papers. Citation times ranged from 331 cites to 4,741. Twelve countries contributed to the 100 articles and the United States topped the list with 86% of the papers. The authors with more articles were Thomas F. Babor (n=6)

and William R. Miller (n=5). Our study lists the 100 top-cited articles in substance abuse and determined the most influential topics, authors, countries, and journals that had outstanding contributions to the studies of this area.

12. Patricia A. Cavazos-Rehg, *Melissa J. Krauss, Shaina J. Sowles, Kidist Zewdie, Laura Bierut, Department of Psychiatry, Washington University School of Medicine*

A MIXED-METHODS APPROACH TO UNDERSTANDING MARIJUANA USE DRIVING EFFECTS USING THE PERSPECTIVES OF HIGH POTENCY MARIJUANA USERS

With advancing marijuana legalization in the United States, a primary concern is the possible increase in consequences relating to marijuana driving impairment, especially among users of high potency marijuana. In this study we assess the risk perception and experiences of driving under the influence of marijuana by interviewing and surveying marijuana concentrates users. Participants from two studies were queried about driving after using marijuana. In Study 1, phone interviews (n=20) were conducted with marijuana concentrates users between April and October 2015. In Study 2, we conducted a nationwide survey of marijuana concentrates users (n=234) recruited using SurveyMonkey® Audience in September 2015. Responses to marijuana and driving-related questions were qualitatively coded for themes (e.g. riskiness, engagement in behavior) developed by the research team. 79% of interviewees in Study 1 reported driving after using marijuana; 63% believed that the risk involved was dependent on the individual (i.e., response/tolerance) or the amount/type of marijuana consumed. In Study 2, 34% reported driving after concentrates use at least once in the past month and 32% believed that the level of risk depended on the individual. There was a significant relationship between perceived level of risk and actually engaging in the behavior of driving after concentrates use. More research is needed on how marijuana, especially in its concentrated form, impacts driving ability in order to develop appropriate, scientifically sound regulations. There is a need to improve and more widely disseminate prevention messages on marijuana use and driving risks.

13. Virmarie Correa-Fernández, *University of Houston; A. Broyles, B.S., University of Houston; Larkin L. Strong, Ph.D., University of Texas MD Anderson Cancer Center; Whitney L. Heppner, Ph.D, Georgia College & State University; Y. Castro, Ph.D., University of Texas Austin (vcorreaf@central.uh.edu)*

TRAIT MINDFULNESS AND ALCOHOL USE SEVERITY AMONG HISPANIC ADULTS

Despite similar rates of alcohol use compared to Non-Hispanics, Hispanics are more likely to suffer from alcohol related injuries or fatalities. Hispanics had higher rates of alcohol-attributable car crash injuries, emergency room visits, and homicides. Understanding psychosocial factors related to problematic alcohol use may help to address these alcohol-related disparities within the Hispanic community. Trait mindfulness has been identified as a protective factor against problematic alcohol use behaviors in general populations, but little research has focused on this relationship within Hispanics. This study examined associations of trait mindfulness with alcohol use severity in a sample of Hispanic adults. Participants were 140 bilingual Hispanic residents of the greater Houston area (mean age 36 years, 56% female, 63% >high school/GED, 53% unemployed, 67% not partnered). Participants completed questionnaires focused on various aspects of their behavioral health and contextual factors. Trait mindfulness was measured through the Five Facet of Mindfulness Questionnaire (FFMQ). Alcohol use severity was assessed through the Alcohol Use Disorder Identification Test (AUDIT) and meeting criteria for heavy drinking. Linear and logistic regressions were used to examine the associations between mindfulness and alcohol use outcomes. Analyses were adjusted by age, gender, years of education, employment status and partner status. Results showed that among those who previous alcohol use, relatively low trait mindfulness was significantly associated with high AUDIT scores ($p < 0.05$). Additionally, the lower scores in the "act with awareness" facet of the FFMQ were significantly related to higher AUDIT scores as well as higher odds of meeting criteria for heavy drinking (ps < .05). Findings add to the literature linking mindfulness to health risk behaviors. Importantly, low trait mindfulness may be a significant psychosocial factor linked to problematic alcohol use among Hispanics. Mindfulness-based interventions aimed at increasing one's ability to stay mindful and present in the moment could potentially help reduce problematic levels of alcohol use. Particular focus on building mindfulness skills specific to acting with awareness may be of benefit above and beyond broad mindfulness training with Hispanic populations who endorse problematic levels of alcohol use.

14. Ronald B. Cox, Jr., *I.J. Washburn, J.M. Croff, Oklahoma State University (r.cox@okstate.edu)*

SCHOOL LEVEL AFFECTS OF PARENTAL INVOLVEMENT IN SCHOOL AND INDIVIDUAL ATOD USE AMONG LATINO EARLY ADOLESCENTS

The increased risk of alcohol tobacco and other drug (ATOD) use among Latino youth coupled with the projection that Latinos will constitute half of all school-age children by 2050, suggest the widening of ATOD related health disparities without novel and effective prevention strategies targeting this population. Recent reviews indicate that many adolescent problem behaviors have common antecedents and argue that prevention efforts may enhance their impact by focusing on the promotion of nurturing environments rather than on specific outcomes. Few studies have tested the direct associations between nurturing environments in one domain (e.g., school) with other domains such as ATOD use. This study examines whether; 1) parents' involvement in their child's schooling is associated with reductions in early adolescent ATOD use among Latino families; 2) parental involvement aggregated at the school-level affects individual-level adolescent ATOD use beyond the level-1 effects of parental involvement; and 3) these associations are moderated by gender. Participants were Latino students from 12 urban schools in the Midwestern US (N = 631). Mean age was 13.14 years, 47% were female, and 95% qualified for free or reduced lunch. Mother and father involvement in school were each measured by four items that capture three types of parental involvement in schooling. Outcome was age of first use for ATOD. Control variables for all analyses were parent education, fluency, and alcohol problems. Individual level mother and father involvement in school are both positively associated with teens never having used alcohol, cigarette, and marijuana suggesting a spillover effect from one domain to another. School level mother and father involvement in school were significantly associated with never having used ATOD for girls but not boys. A significant school level quadratic term showed a tipping point at which a preponderance of parental involvement decreases onset of all substances beyond the effects of level-1 parental involvement. These findings suggest that 1) Prevention programs that focus on parental involvement in school may also reduce the initiation of ATOD use among Latino early adolescents; and 2) When a preponderance of females report that their parents are involved in their schooling, it is associated with a shift in the in the culture of the school, such that it becomes protective of ATOD initiation for all the females in the school.

15. Bryan Cruz, *J.A. Pipkin; R.J. Flores; C.A. Hinojosa; L.M. Carcoba; M. Ibarra; A. Nazarian; L.E. O'Dell. The University of Texas at El Paso, Department of Psychology (bcruz2@miners.utep.edu)*

BOTH NICOTINE REWARD AND WITHDRAWAL ARE ENHANCED IN A RODENT MODEL OF DIABETES

It is presently unclear whether diabetic rats experience greater rewarding effects of nicotine and/or negative affective states produced by nicotine withdrawal. The present study utilized a rodent model of diabetes to examine the rewarding effects of nicotine and negative affective states and physical signs produced by withdrawal. Separate groups of rats received systemic administration of either vehicle or streptozotocin (STZ), which destroys insulin-producing beta cells in the pancreas and elevates glucose levels. Place conditioning procedures were utilized to compare the rewarding effects of nicotine (conditioned place preference; CPP) and negative affective states produced by withdrawal (conditioned place aversion; CPA) in vehicle- and STZ-treated rats. CPA and physical signs of withdrawal were compared after administration of the nicotinic receptor antagonist mecamylamine to precipitate withdrawal in nicotine-dependent rats. A subsequent study utilized elevated plus maze (EPM) procedures to compare anxiety-like behavior produced by nicotine withdrawal in vehicle- and STZ-treated rats. STZ-treated rats displayed greater rewarding effects produced nicotine and a larger magnitude of aversive effects and physical signs produced by withdrawal as compared to vehicle-treated controls. STZ-treated rats also displayed higher levels of anxiety-like behavior on the EPM during nicotine withdrawal as compared to controls. The finding that both nicotine reward and withdrawal are enhanced in a rodent model of diabetes implies that the strong behavioral effects of nicotine promote tobacco use in persons with metabolic disorders, such as diabetes.

16. Rodolfo Flores, *K. Uribe; B. Cruz; V. Correa; L.M. Carcoba; L.E. O'Dell. The University of Texas at El Paso, Department of Psychology (rjfloresgarcia@miners.utep.edu)*

EXAMINATION OF SEX DIFFERENCES AND THE ROLE OF OVARIAN HORMONES IN THE EXPRESSION OF NICOTINE WITHDRAWAL IN RATS

Clinical reports indicate that the negative affective states elicited during smoking abstinence are more intense in women than men, and the intensity of the withdrawal syndrome fluctuates across different phases of the estrous cycle. To our knowledge, no one has characterized sex differences or the role of hormone fluctuations in the expression of nicotine withdrawal symptoms. Thus, the present study utilized a rodent model of nicotine withdrawal to compare sex differences and the role of ovarian hormones in the expression of the physical signs and negative affective states produced by nicotine withdrawal. In order to study the role of ovarian hormones, the female rats received either a surgical sham or ovariectomy (OVX) procedure. Fifteen days later, all female and male rats were implanted with an osmotic pump that delivered nicotine for 14 days. On the test day, separate groups of rats received an injection of vehicle or the non-selective nicotinic receptor antagonist, mecamylamine (1.5 or 3.0 mg/kg) to precipitate withdrawal. Rats were then tested in a series of behavioral tests that included the physical signs of withdrawal and 2 tests of anxiety-like behavior (elevated plus maze and light/dark transfer procedure). Immediately after testing, trunk blood was collected for plasma analysis of the stress hormone-corticosterone and the gonadal hormones-testosterone, progesterone and estradiol using ELISA procedures. Female rats also received vaginal lavage procedures to verify the phase of the estrous cycle during testing. Our preliminary results suggest that females display a larger magnitude of physical signs and anxiety-like behavior during withdrawal as compared to males and OVX rats. The latter effect appears to be most strongly correlated with high levels of corticosterone. Although the males did show signs of withdrawal, this effect did not appear to be correlated with testosterone levels. Our current results provide evidence for a relationship between stress peptides and the expression of nicotine withdrawal in females.

17. Jessica Frankeberger, *C.D. Kaplan, A. Cepeda, A. Valdez, University of Southern California (frankebe@usc.edu)*

EFFECTIVENESS OF A PROJECTION MAPPING HIV EDUCATION AND HARM REDUCTION INTERVENTION AMONG CRACK USERS IN MEXICO CITY

Crack cocaine use has increased rapidly throughout Mexico, along with rising HIV and HCV infections among vulnerable groups. This intersection has left Mexico on the verge of potential HIV and HCV outbreaks among drug using populations with need for urgent action. Using projection mapping technology, Tirando Esquina: Interviniendo Muros de Salud (TE:IMS) is the first of its kind to reach and provide health education at an individual and community level to vulnerable at-risk crack smoking populations in Mexico. This paper presents an evaluation of the effectiveness and feasibility of an HIV education and harm reduction intervention. The TE:IMS intervention consisted of projection mapping, an avante garde community-based art form in which 3-D images, videos, and graphics are projected onto buildings in the community. A total of nine different episodes were projected, including messages of HIV transmission routes, HIV's effect on the body, social consequences of long-term crack use, physical health effects of crack use, and unsafe crack smoking practices. During these projections, health promoters engaged individuals on the street to reinforce health education messages and distribute safer crack kits. A sample of active crack users (n=58) were recruited prior to the intervention to complete pretest-posttest evaluation questionnaires. Overall, our results show participants were exposed to a mean of 2.1 projections over the course of the project and 50 safer crack kits were distributed. Findings provide evidence of limited efficacy. Decreases were found in weekly crack use from pre- to post-test, ($p<.05$), sharing of paraphernalia ($p =.002$) and use of cans as pipes ($p =.008$), while increases were observed in the usage of Pyrex pipes ($p=.002$). While HIV knowledge did not increase significantly, qualitative data suggests that the intervention made a substantial impact on those who interacted with the health promotors and saw the projections. Overall TE:IMS was successful in providing health education and harm reduction strategies at a community level to vulnerable at-risk crack smoking populations in Mexico City. These findings provide evidence for the effectiveness of education and harm reduction efforts in this population.

18. Anaid Gonzalvez, *F. F. Marsiglia, S. Kulis, S. Ayers, P. Smokowski, & A. Gonzalvez. Arizona State University (anaid.gonzalvez@asu.edu)*

MEXICAN ADOLESCENTS' EXPERIENCES WITH VIOLENCE AND SUBSTANCE USE

Mexico has seen widespread violence in recent years, which continues to impact communities throughout the country. It is known that youth in the U.S. who experience violence (whether as perpetrator, victim, or witness) are at higher risk of substance abuse. However, it remains unknown how this co-occurrence of violence and substance use impacts Mexican adolescents' vulnerability to using substances and the effectiveness of strategies to prevent or resist substance use. Focus groups were held in schools with 7th and 9th grade students in three of Mexico's largest cities: Mexico City, Monterrey, and Guadalajara. Each city had three focus groups, for a total of nine (47 males and 56 females). A semi-structured format was used, in which the facilitator asked about scenarios where alcohol and drugs were present, situations where adolescents were offered drugs, and strategies they used to resist using substances. The responses were coded, and themes were identified and validated by a bi-national team. Substance use and violence (or threat of) were consistently

discussed together by the students. This co-occurrence was identified as a major them with four sub-themes. (1) Violence inside and outside of home. Inside violence took place in the family setting with family members using drugs. Outside threats and intimidation came from those who offered drugs. (2) Violence as a self-defense measure against drug offers. Adolescents became frustrated when simply saying "no" did not work; they described hitting, kicking, or slapping the person offering the drug. (3) Violence as way to intervene with friends' drug use. Adolescents described getting into fights with friends who they saw using drugs. (4) Violence as a result of substance use. Delinquency and violence were used in order to pay for drugs from gangs and drug dealers. The themes that emerged provide in-depth information regarding Mexican adolescents' experiences of violence in the context of substance use. These findings will be used to inform the cultural adaptation of Mantente REAL, an adolescent substance use prevention program. These findings will help the curriculum be more representative of Mexican adolescents' actual lived experiences. New resistance strategies in light of these heightened risky situations should be incorporated into the curriculum, in order to help adolescents stand up for themselves bravely, but without jeopardizing their safety.

19. Mariano Kanamori, *M. De La Rosa; M.J. Trepka. Center for Research on U.S. Latinos HIV/AIDS and Drug Abuse, Florida International University; K. Fujimoto. Center for Health Promotion and Preventive Research, The University of Texas; M. Williams. The Robert Stempel College of Public Health & Social Work, Florida International University; J. Schneider. Chicago Center for HIV Elimination, University of Chicago. (mkanamor@fiu.edu)*

THE ASSOCIATION BETWEEN IMMIGRATION CONCERNS AND AT RISK DRINKING IN LATINO SEASONAL FARMWORKERS' EGOCENTRIC NETWORKS.

Between 150,000 and 200,000 migrant and seasonal farmworkers work in Florida every year. Latino female seasonal workers (LFSWs) in the US are a medically underserved group. Approximately of LFSWs 75% live below the poverty level, with an average family income between $17,500 and $19,000. This study's aims are to: (1) identify structural characteristics of LFSWs' social networks in relation to their immigration concerns (fears of deportation, exposure to discrimination, questioning of their legal status); and, (2) identify the associations between immigration concerns and at risk drinking. Data were collected in 2015-2016 from 263 LFSWs, aged 18 years and older, and grouped into 20 egocentric networks. We used the AUDIT test to identify those at risk drinkers defined as those participants who scored eight or more on the AUDIT test. Questions about immigration concerns included 5 point Liker type scale questions from the Caetano Acculturation Stress Scale. Data analyses [i.e., visual representation of networks using node attributes and OneWay ANOVA] were performed using SPSS 22, UCINET 6, and NetDraw 2.160. The prevalence of at risk drinking varied across LFSW age groups: 18% (age 21-29), 14% (age 30-39), 12% (age 40-49), and 32% (age 50 and older). Findings showed that 65% were preoccupied/tense about their legal status, 65% about deportation, and 44% about discrimination. All 20 egocentric networks included women that were preoccupied/tense because of concerns about discrimination or their legal status, regardless of their country of birth. At-risk drinkers reported significantly higher scores on being preoccupied/tense about their discrimination experiences (F=8.56; DF=1; P=.004) and being questioned about their legal status (F=4.83; DF=1; P=0.029) than LFSWs who were low-risk drinkers or did not drink. Egocentric networks of only US-born LFSWs were not preoccupied/tense about deportation. This study provides insight into the network contexts associated with immigration and discrimination and alcohol use among LFSWs. US born and non-US born LFSWs may be facing discrimination due to physical stereotyping. Alcohol-related problems in this community could increase due to increases in immigration stress and the disruption of social networks due to mass deportations.

20. Erin M. Kerrison, *H. Amaro, University of Southern California, Suzanne Dworak-Peck School of Social Work and Keck School of Medicine (kerrison@berkeley.edu)*

THE IMPACT OF SOCIAL NETWORKS ON RESIDENTIAL SUD TREATMENT RETENTION: PRELIMINARY ANALYSES FROM A DIVERSE SAMPLE OF DISADVANTAGED WOMEN

Prior research has documented the roles of social support and social networks in recovery from substance use disorder (SUD). However, these studies are lacking in two important ways: the research descriptively identifies types of social networks that exist for this population, but fails to empirically examine how those structures shape treatment retention; and the samples used in these studies have been all-male, focused primarily on the experiences of White research subjects, and/or have been very small. There remains a dearth of knowledge of how social networks function to support poor, ethnoracially diverse women participating in residential SUD treatment, and these preliminary findings seek to address that gap. These secondary data analyses make use of four waves of self-report data from a larger randomized control trial (R01 DA038648-01A1), that were collected from a sample of diverse women participating in SUD residential treatment. Principal measures used include pertinent social network details as outlined by the "Important People Drug and Alcohol" (IPDA) instrument, and capture the reported influence of a series of individuals over the age of 12 years old, on the respondents' drug and alcohol use at baseline treatment entry and 8 months post-intervention. Growth curve and latent class models will be used to measure the longitudinal influence of typologies of social networks on treatment retention for the experimental group compared to retention trends exhibited by participants in the control condition. Findings will demonstrate how social network influences vary by patient race and ethnicity, age, and drug of choice characteristics. Findings will also illustrate whether different social network influences create subtypes of SUD treatment retention patterns. Preliminary findings will demonstrate the extent to which reported social network schema impact residential treatment adherence and retention for an understudied sample of approximately 200 low-income Black, Latina and White women. Findings from these quantitative analyses will provide important information that can be used to inform service development and future research, and these results can be used to improve treatment experiences and retention.

21. Stephen Kulis, *Flavio Marsiglia, Arizona State University (kulis@asu.edu)*

INVESTIGATING TRADITIONAL GENDER ROLES AND THEIR IMPACT ON ADOLESCENT SUBSTANCE USE IN MEXICO'S THREE LARGEST CITIES

Traditional gender roles and expectations are undergoing rapid change in many countries, including Mexico. Traditionally, the cultural ideal of machismo encouraged aggressive and risk-taking behavior in males, while marianismo encouraged passivity and submissiveness in females. These expectations have promoted substance use in males, while discouraging it in females. However, evidence demonstrates that this gender gap in substance use is quickly narrowing in Mexico, which may be due to the changes in traditional gender roles. This study examined differences in substance use by Mexican adolescents, and how these were explained by traditional gender roles and expectations. Data were collected from 4,937 7th grade students in the three largest cities in Mexico: Mexico City, Monterrey, and Guadalajara. Surveys were implemented in schools and measures consisted of several constructs related to substance use in adolescents, including rates of alcohol, cigarette, marijuana, and other drug use. Substance use intentions, offers, peer use, and refusal/resistance skills were also analyzed, in addition to norms, attitudes, and refusal

skills towards substances. To measure gender roles and expectations, a traditional gender roles scale which presented polarized gender division of power and responsibilities was used. This scale was then used in OLS regression models to test if traditional gender roles and expectations predicted substance use outcomes and differences for males and females. For both males and females, traditional gender roles predicted poorer outcomes in binge drinking, cigarette use, and substance use expectancies. Unexpectedly, traditional gender roles were not associated with better outcomes for females. They were, however, consistently predictive of males' poorer substance use outcomes. Regarding refusal and resistance skills, gender roles predicted lower rates for females, but not males. It is important to acknowledge these cultural aspects when working with Mexican adolescents on substance use prevention. Specifically, females may be receiving conflicting information from their families and from the wider society. As Mexico continues to undergo changes in its gender roles, these differences will likely only increase. Young females and males need culturally appropriate ways to learn effective resistance strategies that incorporate realistic and current issues, such as gender and gender equality.

22. Julie H. Levison, *Y Wang, S.L. Markle, D.L. Mejia, L. Fuentes, L. Albarracín, L. Cellerino, M. Alegría. Massachusetts General Hospital, Department of Medicine; Hospital Universitario Fundación Jiménez Diaz, Madrid, Spain, and Vall d'Hebron University Hospital (jlevison@partners.org)*

HIV AND SEXUALLY TRANSMITTED INFECTION TESTING OUTCOMES IN A MULTI-NATIONAL COHORT OF LATINO MIGRANTS WITH SUBSTANCE USE AND MENTAL HEALTH PROBLEMS.

Individuals with substance use disorders and migrants are at high risk for undiagnosed HIV and lack of access to services. Study participants were enrolled in a randomized trial of a brief behavioral intervention (10 sessions) to improve access to treatment for mental health and substance use problems in Boston, USA, and Barcelona and Madrid, Spain. Eligibility criteria were: age 18-70 years; positive screen for substance use and anxiety, depression, or post-traumatic stress disorder; and not currently receiving substance or mental health care. Risk behaviors and clinical history were assessed at baseline. HIV and STI testing was offered at week-6 for all participants. Biological tests were collected using rapid HIV testing (OraQuick, OraSure Technologies, Inc) and urine nucleic acid amplification testing for Chlamydia trachomatis and Neisseria gonorrhea. A multinomial logistic regression examined potential predictors of HIV or STI test acceptance as compared to those who declined and those that were loss to follow-up (LTFU). HIV and STI testing were offered to 341 individuals of whom 244 (72%) agreed to take HIV/STI testing, 12 (4%) refused, and 85 (25%) were LTFU. Of the total cohort, n=324 (95%) reported trauma exposure and n=100 (29%) were very worried about HIV. While lifetime injection drug use was low (3%), 15% (n=53) reported condomless anal sex. In the multivariable model, those who accepted testing had a higher odd of being age 35 years and older. There was a lower odds of test refusal when the participant was recruited at a community agency or by personal referral compared with primary care site (OR=0.50 [95% CI 0.41-0.60]), and when the main partner had undergone HIV testing (OR=0.27 [95% CI 0.21-0.34]). LTFU was lower in those with a college degree or higher, compared with less than a high school education (OR 0.21 [95% CI 0.17-0.26]) and the odds were higher in those who reported a high concern for HIV compared with no concern (OR=1.68 [95% CI 1.12-2.53]. While nearly three-quarters of Latino migrants accepted HIV/STI testing, those concerned for HIV and with lowest education were more likely to drop out prior to test offering. Mechanisms to personalize the delivery of testing, such as community-based delivery or referral by a known person, may help overcome these barriers to HIV/STI services in this population.

23. Elma I. Lorenzo-Blanco, *University of South Carolina; Erika N. Abad-Vivero, National Institute of Public Health (INSP), Mexico; Inti Barrientos-Gutierrez, INSP, Mexico; Edna Arillo-Santillán, INSP, Mexico; Rosaura Perez-Hernandez, INSP, Mexico; Jennifer B. Unger, USC; James Thrasher, University of SC (lorenzob@mailbox.sc.edu)*

MOVIE LANGUAGE ORIENTATION, GENDER, MOVIE SMOKING EXPOSURE, AND SMOKING SUSCEPTIBILITY AMONG YOUTH IN MEXICO

As a result of globalization, youth in Mexico may be exposed to U.S. culture remotely and this remote intercultural contact may influence their movie language orientation and cigarette smoking. To examine how intercultural contact with U.S. culture influences the smoking behaviors of youth in Mexico, this study investigated the influence of English- and Spanish-language movie orientation on movie smoking exposure through U.S.- and Mexico-produced movies. It also examined whether youth movie smoking exposure was associated with higher positive smoking-related expectancies and greater intentions to smoke cigarettes. Participants were 7524 never-smoker, early adolescents in Mexico (51% female, Mage = 12.39 years) who completed a school-based survey on movie language orientation, movie smoking exposure, smoking-related expectancies, and smoking susceptibility. Path and mediation analyses indicated that English-language movie orientation may be associated with greater movie smoking exposure which may then relate with more positive smoking-related expectancies and greater youth smoking susceptibility. Consistent with research on the influence of U.S. culture on the smoking of Mexi-can-heritage youth in the U.S., findings suggest that orientation toward English-language movies may put youth in Mexico at risk for smoking initiation. Findings extend existing research on in-tercultural contact and cigarette smoking with Hispanic youth in the U.S. to youth in Mexico. Implications for future research are discussed.

24. Melissa C. Maravic, *G.N. Pachas, C. Cather, Massachusetts General Hospital, Harvard Medical School, S. Reyering, Bay Cove Human Services, A.E. Evins, Massachusetts General Hospital, Harvard Medical School (mmaravic@mgh.harvard.edu)*

PCORI PRAGMATIC TRIAL "INTEGRATED SMOKING CESSATION TREATMENT FOR SMOKERS WITH SERIOUS MENTAL ILLNESS": DESIGN AND PRIMARY AIMS

Addiction to tobacco-derived nicotine is highly prevalent among those with serious mental illness (SMI). There is abundant evidence that most smokers with SMI want to quit smoking and extensive clinical trial evidence for efficacy and tolerability of first-line pharmacotherapies for smoking cessation specifically for those with SMI. Despite this evidence, few with SMI are offered advice to quit smoking by their primary care providers, and fewer are prescribed proven effective tobacco dependence pharmacologic and behavioral treatment. This 3-year study will test the effect of academic detailing (AD) (i.e. provider-level educational intervention focused on evidence-based smoking cessation treatment for those with psychiatric illness), alone or in combination with practical support from a community health worker (CHW), on the provision and utilization of smoking cessation treatment to those with SMI and, to determine if these interventions improve smoking cessation rates for smokers with SMI. This study aims to enroll 1090 smokers with SMI who receive psychiatric rehabilitation services from our partners, Bay Cove and Vinfen. Primary care clinics that provide care to these smokers with SMI will be randomly assigned to receive AD delivered to their primary care staff or no intervention. Half of the patients receiving primary care in clinics assigned to receive AD will also be offered CHW support. To date, 543 are enrolled. Investigators hypothesize that those who receive AD+CHW will demonstrate higher rates of tobacco abstinence than those who receive usual care. The primary outcome is the proportion of smokers who are abstinent at the Year Three assessment.

25. Jennifer A. Martin (1); *Aaron Caccamise(1); Rathipriya Viswanathan(1); Craig T. Werner, Ph.D(1); Jessie J. Polanco(1); Fraser J. Sim, Ph.(1); David M. Dietz,(1,2) (1) Department of Pharmacology and Toxicology, Program in Neuroscience; (2) Department of Psychology, The State University of New York at Buffalo (martin96@buffalo.edu)*

A NOVEL ROLE FOR OLIGODENDROCYTE PRECURSOR CELLS (OPCS) AND SOX10 IN MEDIATING CELLULAR AND BEHAVIORAL RESPONSES TO HEROIN

Opiate abuse and addiction have become a worldwide epidemic with great societal and financial burdens, highlighting a critical need to understand the neurobiology of opiate addiction to develop pharmacotherapies. Opiate addiction is a chronic relapsing disease characterized by episodes of compulsive drug seeking. While several studies have focused on drug-dependent changes in neurons, the role of glia in opiate addiction remains largely unstudied. RNA sequencing pathway analysis from the prefrontal cortex of male rats following heroin self-administration revealed changes in several genes associated with oligodendrocyte differentiation and maturation, including Sox10 which has been shown to be regulated, in part by the chromatin remodeler BRG1/SMARCA4. To directly test the functional role of Sox10 in mediating heroin-induced behavioral plasticity, we overexpressed Sox10 and a Sox10-specific BRG1 selectively in the prefrontal cortex. Overexpression of either Sox10 or BRG1 decreased the motivation to obtain heroin infusions in a progressive ratio test without altering the acquisition or maintenance of heroin self-administration. These data demonstrate a critical, and perhaps compensatory, role of Sox10 and BRG1 in oligodendrocytes in regulating the motivation for heroin.

26. Cristina Mogro-Wilson, *A. Melville. University of Connecticut, School of Social Work. (cristina.wilson@uconn.edu)*

PARENTING DIFFERENCES FOR PUERTO RICAN AND HISPANIC YOUNG FATHERS IN A COMMUNITY BASED FATHERHOOD INTERVENTION.

Parenting intervention programs for fathers have been found to increase parenting knowledge and decrease parenting practices linked to abuse or neglect risk. Due to the paucity of disaggregated data for parenting intervention programs, it is unknown whether the benefits of these programs differ for young fathers based on race/ethnicity. Few parenting interventions have been adapted or evaluated for use specifically with Hispanic subgroups. The major aims of this presentation are to explore the impact of a fatherhood intervention program on risky parenting attitudes and to understand the differences in intervention outcomes between Puerto Rican and non-Puerto Rican Hispanic subgroups. A total of 190 fathers (Puerto Rican n= 118 and non-Puerto Rican Hispanic n=72) participated in a 15-week fatherhood intervention in urban city in the Northeast. Fathers were assessed on parenting measures at baseline and post-intervention, and 2, 8, and 12 months post-intervention. This study explores rates of change on a measure of parenting attitudes and risk factors for abusive and neglectful parenting using maximum likelihood estimates of means analyses. Differences in changes in risky parenting attitudes for Puerto Rican and non-Puerto Rican Hispanic fathers from pre- to post-intervention approached significance (p=.062), with both groups demonstrating increases in risky parenting attitudes throughout the intervention and non-Puerto Rican Hispanic fathers having greater increases in risky parenting attitudes than Puerto Rican fathers. Significant differences emerged in changes in risky parenting attitudes from baseline to the 12-month follow-up (p = .030) for Puerto Rican and Hispanic fathers, with non-Puerto Rican Hispanic fathers demonstrating overall increases in risky parenting attitudes (MΔH = 9.34) and Puerto Rican fathers demonstrating overall decreases in risky parenting attitudes (MΔPR = -1.64) one year after the parenting intervention. This study allows for an in-depth exploration of the long-term outcomes of a parenting intervention on a diverse group of young, low-income Hispanic fathers. Puerto Rican fathers demonstrated an overall decrease in risky parenting attitudes one year following the parenting intervention, not initially seen immediately seen posttreatment. In contrast, non-Puerto Rican Hispanic fathers demonstrated an increase in risky parenting attitudes that was sustained through the one year follow-up.

27. Mark D. Namba (1), *G.L. Powell (1,2), J.G. Goenaga(1), A.P. Del Franco(2), J.J. McCallum(2), C.D. Gipson (1) (1) Department of Psychology, Arizona State University (2)School of Life Sciences, Arizona State University (mnamba@asu.edu)*

N-ACETYLCYSTEINE ATTENUATES CUE-INDUCED NICOTINE SEEKING THROUGH A GLT-1-DEPENDENT MECHANISM AND DECREASES NEUROINFLAMMATORY TNFA EXPRESSION IN THE NUCLEUS ACCUMBENS CORE

Nicotine addiction is a significant public health liability that remains the leading cause of preventable death in the United States. Nicotine self-administration is associated with decreased expression of the glial glutamate transporter (GLT-1) and the cystine-glutamate exchange protein xCT. N-acetylcysteine (NAC), an antioxidant and glutamatergic agent, has been demonstrated to restore these proteins associated with increased relapse vulnerability. However, the specific molecular mechanisms driving its inhibitory effects on cue-induced nicotine reinstatement are unknown. In the present study, rats were trained to self-administer nicotine (0.02 mg/kg/infusion) and underwent extinction training, where they received chronic NAC (100 mg/kg/day, i.p. for 5 days) and an antisense vivo-morpholino (30 pmol/injection/day for 3 days) designed to selectively suppress GLT-1 expression in the nucleus accumbens core (NAcore). Following extinction, rats were tested for cue-induced nicotine reinstatement and GLT-1 protein expression was assessed in the NAcore. Chronic NAC treatment significantly increased GLT-1 levels and attenuated cue-induced nicotine seeking relative to saline controls. As well, GLT-1 antisense vivo morpholino significantly suppressed GLT-1 levels in the NAcore, which blocked the attenuating effect of NAC on reinstated nicotine seeking. Unlike what has been observed with cue-induced cocaine reinstatement, inhibition of GLT-1 expression and administration of NAC did not augment reinstatement above control conditions. Interestingly, chronic NAC treatment was also associated with a substantial decrease in tumor necrosis factor alpha (TNFα) expression relative to saline controls, indicating a possible anti-inflammatory mechanism of NAC that may be relevant to reducing nicotine relapse vulnerability. These results suggest that while GLT-1 may be a conserved neurobiological substrate underlying relapse across drugs of abuse, there are other potential mechanisms underlying NAC's therapeutic efficacy in the treatment of nicotine addiction and relapse.

28. Kathryn M. Nowotny, *University of Miami (kathryn.nowotny@miami.edu)*

THE EFFECTS OF INCARCERATION ON COMMUNITY HEALTH SERVICES FOR MATCHED SAMPLES OF BLACK, HISPANIC, AND WHITE YOUNG ADULTS

Black and Latino young adults are incarcerated in the United States at a disproportionate rate and are overrepresented in drug-related arrests. In response, social scientists have investigated the many negative consequences of criminal justice contact. This study asks, after adjusting for differential selection into incarceration, do formerly incarcerated young adults have worse community health outcomes compared to matched controls (1) who have never been arrested or incarcerated, and (2) who have been arrested but never incarcerated? Heterogeneous treatment effects test whether the effects of imprisonment are the same for black and Hispanic young adults. Data are from Waves I and IV of the restricted use version of the National Longitudinal Study of Adolescent

to Adult Health (Add Health). The study sample includes men and women aged 24-34 years and a quasi-experimental design assigns respondents into treatment (e.g., ever being incarcerated) and control conditions adjusting for differential likelihood of incarceration (e.g., adolescent drug use, parental incarceration, etc.). The unadjusted effects suggest that, in general, incarceration affects white young adults more so than black or Hispanic. For example, the unadjusted effect on no health insurance is 21.5 for blacks, 25.8 for whites, and 15.9 for Hispanics. The low effect for Hispanics seems to be due to their overall lower rates of coverage. For the emergency room outcome, however, the effects are highest for Hispanic young adults. In the adjusted propensity score models, the average treatment effects vary across race/ethnicity, but they are not significantly different. Mediation analysis indicates that changes in socioeconomic status post-release account for some of the effect of incarceration on health service outcomes. There is, generally, a causal effect of imprisonment on health service outcomes—not having health insurance, overuse of emergency departments, and not having a past-year checkup—robust across models, even when restricting the control condition with about half of the association between imprisonment and health service outcomes due to selection effects. This negative effect of imprisonment on health services is the same for black, Latino, and white young adults. However, a higher proportion of black and Latino adults are exposed to these negative effects, which, ultimately, will lead to exacerbated health disparities

29. Manuel A. Ocasio, *G. Prado, University of Miami, Miller School of Medicine, Department of Public Health Sciences (mocasio@med.miami.edu)*

EXPLAINING SEXUAL MINORITY HISPANIC ADOLESCENT SEXUAL RISK AND DRUG USE WITHIN AN ECODEVELOPMENTAL THEORETICAL FRAMEWORK

Research indicates that sexual orientation-specific family factors (e.g., parental response to a child's sexual minority identity) are strongly associated with drug use and unprotected sex in sexual minorities (e.g., gay, same-sex attracted). However, non-sexual orientation-specific family factors examined in conjunction with other socioecological factors have not been comprehensively examined in sexual minorities, let alone sexual minority Hispanic adolescents (SMHA). This study tests the interplay of multiple ecodevelopmental levels of risk and protective processes centered around non-sexual orientation specific family factors on past 90-day illicit drug use (IDU) and condomless sex (CS) in SMHA. Baseline data for SMHA (n=195) from five separate trials of Familias Unidas, a family-based prevention intervention for Hispanic adolescents were synthesized. SMHA were identified based on self-reported oral/anal/vaginal sex with a same gender partner. A hypothesized structural model with factors relevant to this population (e.g., parental monitoring (PM), drug using peers (DUP)) was formulated. A multigroup confirmatory factor analysis (mCFA) was conducted to ascertain the feasibility of collapsing family functioning (FF) indicators - parental involvement, positive parenting, family communication, parent-adolescent communication - into a latent construct and testing measurement invariance across trials. The mCFA was embedded within the structural model to test for effects on IDU and CS. Model fit was assessed using established cut offs for the comparative fit index (CFI) and root mean square error of approximation (RMSEA). Significant (i.e., $p<0.05$) standardized path coefficients (B) and standard errors (SE) are reported. Partial metric invariance was found for the mCFA for FF across trials (CFI= 0.99; RMSEA=0.04, p=0.57). The full structural model also yielded good fit (CFI= 1.0; RMSEA< 0.001, p=0.88). PM predicted not having DUP (B=-0.47, SE=0.12) and sexually-active peers (B=-0.33, SE=0.12). Having DUP also predicted IDU (B=0.54, SE=0.14). No direct paths to CS reached significance. An ecodevelopmental framework is appropriate to simultaneously test multilevel social processes that impact risk behavior in SMHA. Results suggest that non-sexual orientation family factors do not impact risk behaviors; however, parental monitoring may be particularly important for SMHA drug use prevention.

30. Gladys N. Pachas, *M. Maravic, C. Cather, Massachusetts General Hospital, Harvard Medical School, S. Reyering Bay Cove Human Services, A.E. Evins Massachusetts General Hospital, Harvard Medical School (gpachas1@mgh.harvard.edu)*

SELF-REPORTED SMOKING BEHAVIOR AND CESSATION EXPERIENCE AMONG HISPANIC AND NON-HISPANIC SMOKERS WITH SERIOUS MENTAL ILLNESS (SMI)

People with SMI die on average 25 years earlier than the general U.S. population. Much of this is attributed to cardiovascular and pulmonary diseases associated with major risk factors such as cigarette smoking. Similar rates occur among racial and ethnic minority groups. While there is little data on the morbidity and mortality associated with smoking among Hispanic (H) with SMI, we assume these rates are at least equivalent among this population

Our goal was to identify differences between H and non Hispanic (NH) smokers with SMI on self-reported smoking behavior and interactions with PCP around cessation treatment. We conducted a survey as part of the study "Integrated Smoking Cessation Treatment for Smokers with Serious Mental Illnesses" among smokers with SMI in the Boston area

Of the 971 surveyed, 70.3% were male and 16.5% identified as H. Average age (all) was 47.9±12.9 years with H being significantly younger than NH ($p<0.001$). Most participants reported smoking within 5 mins of waking (39.9%) with an average expired CO of 22.5±20.6. There were no significant differences by ethnicity on any of these variables. Most participants smoke 11-20 tobacco products/day (TPD=32.7%) with H smoking significantly less TPD than NH (p=0.049). On average, smokers scored a 2.89±1.7 on the Heaviness of Smoking Index (HSI) indicating low to moderate dependence. H had significantly lower HSI scores than NH (H=2.69±1.79, NH=2.92±1.65,p=0.033). 92.5% reported their PCP is aware that they smoke. Among those who saw their PCP in the past year, 71.4% reported being advised to quit smoking; H reported being prescribed any cessation treatment at higher, but not significant, rates than NH (p=0.093). Significant differences exist regarding PCPs prescribing nicotine replacement therapies (NRT), specifically nicotine patches (H=32.5%,NH=23.4%,p=0.021), nicotine lozenges/gum (H=23.8.6%,NH=16.3%,p=0.030). There were no differences for varenicline, bupropion, cessation groups or the quit line

While H smokers with SMI smoke significantly less and had lower HSI scores than NH, they still have low to moderate nicotine dependence. More H smokers with SMI report being prescribed NRT by their PCP than NH, specifically, nicotine patches, lozenges or gum. In general, rates of provision of guideline-concordant smoking cessation treatment in primary care to those with SMI are low, which likely contributes to the low rates of cessation and the subsequent mortality disparity in this population.

31. Robert L. Peralta, *James Carter, Juan Xi, The University of Akron (rp32@uakron.edu)*

DOES A STRONG SENSE OF ETHNIC IDENTITY REDUCE THE LIKELIHOOD OF PRESCRIPTION DRUG MISUSE? FINDINGS FROM A MIDWESTERN COLLEGE SAMPLE

Non-medical prescription drug (NMPD) misuse remains a public health concern in the general population and among college students in particular. Framed by Ethnic Identity Theory (a component of Social Learning Theory), this study examines NMPD use among a sample of Midwestern college students. We propose that a stronger sense of ethnic identity may reduce the likelihood of NMPD use among college students due to ethnic identity's ties to self-esteem and self-efficacy. We further propose that the protective power of ethnic

identity may vary according to one's own ethno-racial identity. METHODS: Data for this study were collected from a survey of undergraduate students at a single Midwest University (N=544). Ethnic identity was measured using the Multigroup Ethnic Identity Measure. Prescription drug use was measured using standardized prescription drug use measures. Poisson regression analysis were employed to test the relationship between ethnic identity and NMPD use. RESULTS: Findings indicate that a stronger sense of ethnic identity was associated with a reduced frequency of prescription drug abuse among college students. Results also indicate that the relationship between ethnic identity and prescription drug abuse is moderated by race. Ethnic identity was found to be a protective factor for nonwhite participants only. CONCLUSIONS/ DISCUSSION: This study suggests that a sense of ethnic belonging may act as a protective factor against the misuse of prescription drugs among young adults. These findings build upon our understanding of ethnic identity and substance use and abuse. Suggestions for intervention and prevention strategies and future research conclude the study.

32. Natalia A. Quijano Cardé, *E.E. Perez; H. Kranzler; M. De Biasi. University of Pennsylvania, Perelman School of Medicine (qnatalia@mail.med.upenn.edu)*

GLUK1-CONTAINING KAINATE RECEPTORS AS VIABLE TARGETS TO TREAT ALCOHOL ADDICTION

Alcohol Use Disorder (AUD) represents major social, economic, and health burdens in the United States and worldwide. Predisposition to this highly heterogeneous disease is determined by many social, environmental, and genetic factors. The complexity of this disorder contributes to the limitation of available medications to reduce alcohol drinking, thus it is necessary to expand our repertoire of pharmacotherapeutics to treat AUD. Some findings from the last decade suggest GluK1-containing kainate receptors as an attractive, but unexplored target for the treatment of AUD. The anti-epileptic drug topiramate – which is prescribed off-label to treat alcohol dependence – antagonizes this receptor system, but is associated with a wide range of negative side effects. Interestingly, a polymorphism in GRIK1 – the gene that encodes the GluK1 subunit – exerts an influence in predisposition to alcoholism and moderates topiramate treatment outcomes. Moreover, this polymorphism modulates neuronal activation in brain regions associated with alcohol craving, an emotional state that contributes to relapse in AUD patients. Therefore, we wanted to investigate whether selective inhibition of GluK1-containing kainate receptors is sufficient to reduce alcohol consumption in a mouse model of alcohol addiction. For this, alcohol dependence was established in C57Bl/6J mice using the intermittent two-bottle choice drinking paradigm. The efficacy of GluK1-containing kainate receptor blockade to modulate alcohol intake was assessed using the potent, selective and competitive antagonist LY466195. We tested the effect of acute and chronic administration of LY466195 on alcohol consumption and found that selective blockade of GluK1-containing kainate receptors is sufficient to reduce alcohol intake and preference in alcohol dependent mice. We further corroborated that the decrease in alcohol consumption was not secondary to alterations in taste by examining the effect of acute administration of LY466195 on sucrose, saccharin, and quinine intake. Altogether, our findings suggest GluK1-containing kainate receptors as novel viable targets for the treatment of alcohol dependence. Further experiments aim to understand the mechanisms underlying the efficacy of GluK1-containing kainate receptor blockade to decrease alcohol consumption, to ultimately shed light on the development of novel alcohol cessation aids.

33. Esmeralda Ramirez, *J. Frankeberger, V.E. Rodriguez, A. Cepeda, A. Valdez, University of Southern California (esmerami@usc.edu)*

STIS, HCV, AND DRUG USE AMONG A LONGITUDINAL COHORT OF MEXICAN-AMERICAN WOMEN IN A DISADVANTAGED COMMUNITY

Regrettably few studies have documented the long-term health consequences associated with drug use among disadvantaged, gang-affiliated adolescent females. This research fills this existing gap by identifying the prevalence of opioid and methamphetamine use, STIs, and HCV outcomes for Latina women with a history of adolescent gang affiliation. The current study comes from preliminary data from a NIDA-funded longitudinal study among young adult Mexican-American women who were affiliated with gangs during adolescence in San Antonio, TX. Biological specimens were collected among participants and were tested for HIV, Hepatitis C (HCV), Herpes Simplex Virus Type 2 (HSV-2), Neisseria Gonorrhea (NG), and Chlamydia Trachomatis (CT). Drug urinalysis detected the presence of amphetamines, barbiturates, benzodiazepine, cocaine, methamphetamine, opiates, PCP, and THC. Bivariate analysis examined associations between opioid and meth use and infection status. Preliminary findings indicate that 19.7% tested positive for opioids and an equal amount tested positive for methamphetamines. Findings indicate high prevalence of infection including HSV-2 (52.2%), CT (6%), NG (6%), and HCV (22.4%). Opioid and meth users are at increased risk of infection. Meth use was significantly associated with CT infection (X2=9.571, p=0.008), while opioid use was weakly associated with HSV-2 (X2=5.692, p=0.58). Opioid use was significantly associated with HCV infection (X2=10.870, p=.001). In sum, preliminary data indicates detrimental rates of STIs, opioids, and methamphetamine use among this sample of marginalized Latina women. Of particular attention is the emerging high prevalence of methamphetamine use, which contrasts with the traditional drug of choice (i.e., heroin) in this community. Given this increase of meth use in Latina young adults, it is important to explore patterns of drug use and salient health consequences that have gone underrepresented in existing drug research.

34. Grecia Ramos, *A. Cepeda; A. Valdez, University of Southern California, USC Suzanne Dworak-Peck School of Social Work (greciara@usc.edu)*

DRUG USE AMONG MEXICAN-AMERICAN MEN WITH HISTORIES OF INCARCERATION

The proportion of Latino men exposed to incarceration is prominently rising. While drug use is high among those incarcerated, most studies have been done with prison populations and less is understood about the relationship between incarceration experiences and drug use in a community sample. Given the patterns of drug use that have been found in some Mexican-American communities and the high rates of incarceration histories among this specific study sample, the current study looks at drug use and the varying incarceration experiences among a sample of Mexican-American young men. The data used is from the At Risk Hispanic Gangs Study, a NIDA funded longitudinal research project focusing on examining the relationship between gang violence and drug use among Mexican-American males from San Antonio, Texas who were affiliated with gangs during adolescence. To explore the complex experiences of incarceration, the present study looks at various incarceration variables such as number of incarceration episodes, total months incarcerated, and number of times incarcerated for more than 30 days. In addition, we also include whether individuals have ever been convicted of a felony, number of times convicted of a felony, and age of first felony conviction. Multiple regression analyses were used to examine the association of incarceration experiences with various drugs. Overall, findings indicate an association between incarceration experiences and tobacco and heroin use. In particular, there appears to be an important relationship

between experiences with felony convictions and recent drug use. These findings suggest the need for further research to investigate the dynamic experiences of incarceration and its association with different types of drug use, especially among subgroups that are seldom included in incarceration research. Findings indicate that both our models for recent tobacco use (p=0.005) and recent heroin use (p=0.04) are significant. Specifically, age of first felony conviction is significantly associated with recent tobacco use (last 30 days) (p=0.01). In addition, having ever been convicted of a felony (p=0.03), number of times convicted of a felony (p=0.02), and age of first felony conviction (0.01) are significantly associated with recent heroin use (last 30 days). Our models for recent marijuana (p=0.85) and alcohol use (p=0.30) were not significant. Overall, findings indicate an association between incarceration experiences and tobacco and heroin use. In particular, there appears to be an important relationship between experiences with felony convictions and recent drug use. These findings suggest the need for further research to investigate the dynamic experiences of incarceration and its association with different types of drug use, especially among subgroups that are seldom included in incarceration research.

35. Victoria Rodriguez, *E. Ramirez, J.F. Frankeberger, A. Cepeda, A. Valdez, University of Southern California (victorer@usc.edu)*

HEALTH AND DRUG USE DISPARITIES AMONG LATINA WOMEN WHO HAVE SEX WITH WOMEN AND MEN (LWSWM) IN A DISADVANTAGED COMMUNITY

While research on sexual and gender minority populations (SGM) has generally focused on men, we know far less about females. This is especially true for bisexual, racial/ethnic minority, and low-income women, and their vulnerability to negative health risk behaviors. The current study reports preliminary findings from Proyecto San Antonio Latina Trajectory Outcomes (Proyecto SALTO) examining the interaction processes and cultural/contextual influences that adversely affect drug and health risk profiles among socio-economically marginalized Latina Women who have Sex with Women and Men (LWSWM). Using data from an ongoing NIDA-funded longitudinal study, we present a health risk profile of Latina women who reported ever having a same-sex sexual encounter compared to Latina women who have sex with only men (LWSM). Bivariate analyses were used to compare drug use, incarceration experiences, trauma and infection histories of LWSWM and LWSM. Preliminary findings indicate that while all participants had male partners, 28% of the sample also has had a same-sex partner. Significant differences was also found in health profiles comparing LWSWM and LWSM. LWSWM have higher rates of HCV (50% vs. 13.5%, p< 0.001), which is likely mediated by higher rates of daily IDU drug use during the past year (31.8% vs. 2%, p< 0.001). LWSWM test positive at significantly higher rates for THC, opiates, and PCP during drug urinalysis. More stressful life events and traumatic experiences were found for LWSWM. Last, stark differences in incarceration histories revealed that 91% of LWSWM, compared to 51% of LWSM, have been incarcerated at least once. Further, LWSWM have longer stays and more total incarceration episodes than LWSM. LWSWM are at high risk and particularly vulnerable for developing harmful drug use and related health risks, as well as increased criminal justice activity. Discussed are the public health implications for Latina bisexual women who have gone particularly underrepresented in SGM and drug research.

36. Mariana Sanchez, *(1), C. Dawson (1), S. Diez (1), E. Cyrus (1), M.A. Cano, E. Romano (2), P. Rojas (1), M.R. De La Rosa (1). 1 Florida International Universty, 2 Pacific Institute for Research and Evaluation (msanc062@fiu.edu)*

RELIGIOUS SOCIAL CAPITAL: ITS IMPACT ON SOCIAL SUPPORT AND ACCULTURATIVE STRESS OF RECENT LATINO IMMIGRANTS

Religion plays a prominent role in Latino culture and could be influential during difficult life transitions, such as those experienced during the course of immigration. Religious institutions can provide familiarity to recent Latino immigrants struggling to adjust to a new culture, and may be particularly influential to undocumented immigrants who are often marginalized from other formal institutions. This study examines (a) changes in pre- to post-immigration religious social capital among documented and undocumented recent Latino immigrants, (b) the direct and indirect effects of religious social capital and social support on post-immigration acculturative stress, and (c) a moderated mediation model whereby mediating effects of social support between religious social capital and acculturative stress are moderated by documentation status. Retrospective pre-immigration data was collected at baseline from a sample of 455 Latinos ages 18-34 who had immigrated to the US less than one year prior. Two follow-up assessments (12 months apart) reported on post-immigration experience. Results revealed decreases in pre- to post-immigration religious social capital in the overall sample with steeper decreases in undocumented compared to documented recent immigrants (b) religious social capital was directly associated with higher levels of social support, and (c) religious social capital had indirect effects on acculturative stress via affectionate social support only among those participants with undocumented legal status. Present findings suggest a need for greater attention to religious social capital, as it may represent a valuable resource for recent Latino immigrants, particularly among vulnerable and marginalized groups such as undocumented immigrants. Future research directions and implications for culturally tailored service delivery with recent Latino immigrants are presented.

37. Vanessa Torres, *I.J. Ornelas, D. Donovan, B. Duran, S.E. Serrano, University of Washington (torresvn@uw.edu)*

RECRUITMENT AND RETENTION STRATEGIES FOR CONDUCTING COMMUNITY-BASED ALCOHOL RESEARCH WITH LATINO IMMIGRANT DAY LABORERS

Despite efforts to understand patterns of alcohol use among Latino immigrant men, they are underrepresented in community-based studies. This may be due to participant fear and mistrust based on a history of exploitation, lack of culturally appropiate recruitment and engagement strategies, and competing priorities. The purpose of this study is to identify culturally and linguistically appropiate strategiesto engage Latino immigrantmenin community-based research to better address their health priorities, such as unhealhty alcohol use. We conducted in-depth interviews with a sample of participants (N= 30) in the Vida PURA study. Vida PURA was a randomized controlled trial of a culturally adapted screening and brief intervention to reduce unhealthy alcohol use (N=181). Participants were Latino immigrant men with unhealthy alcohol use recruited from a day labor worker center. Interviews were conducted in Spanish and included questions about their motives for participating in the study, barriers and facilitators of participation, and best methods for reaching participants. The interviews were transcribed and analyzed in Spanish. Transcriptions were coded and reviewed, in order to identify themes. Findings indicated that participants' interest in participating in the study was related to the relevance of topic to their lives, being fairly compensated for their time, and feeling a sense of solidarity with the Latino community. For recruitment and retention strategies, participants specified the importance of the visibility of the bilingual Latino research team in the worker center throughout the study. While a few

participants mentioned having access to email or Facebook, the majority of the men preferred to be contacted either via text or phone. Overall, in-person contact was preferred. Our findings suggest that community engagement strategies can be helpful in developing trust among participants and maintaining contact with participants. Future research is needed among this vulnerable population to fully understand their patterns of alcohol use.

38. Federico E. Vaca, *(1) J. Reynolds (1); J. Dziura (1); A. Hsiao (1); *C. Field (2); M. Pantalon (1); F. Abujarad (1); G. D'Onofrio (1), (1) Yale University School of Medicine and (2) University of Texas El Paso (federico.vaca@yale.edu)*

BINGE DRINKING CHARACTERISTICS OF LATINO EMERGENCY DEPARTMENT PATIENTS

One in 6 US drinking adults binge-drink and do so 4 times/month. Disparities in alcohol use disorders are pervasive. Latino males have the highest prevalence of daily heavy drinking and are more likely to binge drink. The associated disease burden is greater than first thought. The gender gap in heavy drinking continues to narrow. The purpose of this study was to evaluate ED Latino drinkers and relationships between binge drinking frequency according to sex, Latino subgroup and ED chief complaint. Baseline demographic and alcohol use data from 530 of 2358 Latino ED patients screened for eligibility for an ongoing large urban ED RCT from 10/14 – 11/16 were analyzed. Self-identified ≥ 18 y/o Latino ED patients with unhealthy drinking (Alcohol Use Disorder Identification Test (AUDIT) > 8)) were consented and interviewed in their preferred primary language. Mann-Whitney and Kruskal-Wallis tests were used to evaluate the association of binge drinking (women ≥4 men ≥5 drinks) frequency with independent variables. All enrolled participants were Latino (N=530). Average age was 37 y/o, 44% were female, half preferred Spanish as primary language and 44% were born outside the US mainland. Latino subgroups were Puerto Rican (81%), Mexican (5%), Dominican (4%), Central/South American, Cuban, or Multiple-Latino subgroup (6%), and Other Latino subgroup (4%). ED chief complaint was Medical (92%) with 8% primary Intoxication or Psychiatric/Mental Health. Of those with a Medical chief complaint, 16% were injury, unintentional (94%) with 48% fall/struck against. The median number of binge episodes in the previous 28-days was 4 (IQR=2, 10). Overall average AUDIT was 13 (±8.2). Men reported a median 5 (IQR=2, 12) binge episodes vs. 3.5 (IQR=2, 8) for women ($p < 0.0001$). Those with an ED chief complaint of Intoxication had a median of 10 (IQR=5, 27) binge episodes vs. 7 (IQR=2, 11) and 4 (IQR=2, 10) for those with a Psychiatric/Mental Health or medical chief complaint respectively ($p< 0.0001$). No significant difference was found between binge frequency and Latino subgroup. In our Latino ED patient study sample, binge drinking was higher than national estimates. For those with chief complaint of Intoxication it was 2.5 times greater. Males had more binge drinking. These findings are critical for ED-based screening, interventions and referral to treatment for Latino ED populations.

39. Federico E. Vaca, *(1) J. Reynolds (1); J. Dziura (1); A. Hsiao (1); *C. Field (2); M. Pantalon (1); F. Abujarad (1); G. D'Onofrio (1); (1) Yale University School of Medicine and (2) University of Texas El Paso (federico.vaca@yale.edu)*

COMPARISON OF CHARACTERISTICS IN LATINO PATIENTS COMPLETING THE ALCOHOL USE DISORDER IDENTIFICATION TEST IN THE EMERGENCY DEPARTMENT

By 2030, US Latinos will total nearly 80 million. Cultural context is an indispensable facet of disparities in alcohol use disorders. Primary language and nativity are influential in drinking patterns. Alcohol use in US adults has increased with disproportionate increases in minorities. The gender gap in heavy drinking continues to close. This study evaluates the relationships of Alcohol Use Disorder Identification Test (AUDIT) scores with sex, language preference, and nativity in ED Latino drinkers. Baseline demographic and alcohol use data from 530 of 2,358 Latino ED patients screened for eligibility for an ongoing large urban ED RCT from 10/14 – 11/16 were analyzed. Self-identified ≥ 18 y/o Latino ED patients with unhealthy drinking (AUDIT) > 8) were consented and interviewed in their preferred primary language. AUDIT scores were compared across subgroups using Independent Samples t-tests. Multivariable analysis using GLM to assess AUDIT scores when age, sex, language, and nativity were in the model. All enrolled were Latino (N=530). Average age was 37 y/o, 44% were female, half preferred Spanish as primary language, and 44% were born outside the US mainland. Latino subgroups were Puerto Rican (81%), Mexican (5%), Dominican (4%), Central/South American, Cuban, or Multiple-Latino subgroup (6%), and Other Latino subgroup (4%). Average AUDIT score was 13. Latino males had higher average AUDIT score (14.5, 95% CI 13.5, 15.4) than Latinas (11.1, 95% CI 10.1,12.1) ($p <0.001$). Those with Spanish as their primary language had higher average AUDIT score (13.8, 95% CI 12.8,14.8 vs. 12.2, 95% CI 11.3,13.2) ($p<0.03$). Those born outside of the US mainland showed a trend toward a higher average AUDIT score (13.7, 95% CI 12.7,14.7 vs. 12.4, 95% CI 11.4,13.4) ($p<0.06$). In the multivariable model, age ($p<0.0001$) and sex ($p<0.0001$) remained significantly associated with AUDIT scores. Latino males and those preferring Spanish as their primary language had significantly higher AUDIT scores. Latinas had an average AUDIT score that suggests need for focused advise on alcohol harm/hazard reduction. The average AUDIT score of those born outside of the US mainland showed a trend toward being higher. Without consideration of language preference and nativity in ED-based screening and interventions, identification and referral could be inadequate for this already vulnerable group.

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