FUNDED BY THE NATIONAL INSTITUTE ON DRUG ABUSE

Eleventh Annual International Conference
Pathways toward Health Equities in Hispanic Populations

August 24 - August 27, 2011
THE WESTIN COLONNADE
CORAL GABLES, FL
Support for this Conference

Funding for this conference was made possible by a grant to the Louisiana State University Health Sciences Center R13DA26647-03 from the National Institute on Drug Abuse and the support of the National Hispanic Science Network on Drug Abuse Contract HHSN271200900025C. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention by trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

National Hispanic Science Network on Drug Abuse
University of Miami Leonard M. Miller School of Medicine
1425 NW 10th Avenue, Suite 301
Miami, Florida 33136
Tel: 305.243.2340  Fax: 305.243.5577
www.hispanicscience.org
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.
Chair, NHSN
Richard Ashman Professor & Head
Department of Physiology
Director, Alcohol & Drug Abuse Center
Louisiana State University Health Sciences Center

Sergio Aguilar-Gaxiola, M.D., Ph.D.
Professor of Clinical Internal Medicine & Director
Center for Reducing Health Disparities (CRHD)
University of California, Davis

Maria Elena Medina-Mora, Ph.D.
General Director, Instituto Nacional de Psiquiatría
Ramón de la Fuente Muñiz, México

Laura O’Dell, Ph.D.
Chair, Early Career Leadership Subcommittee
Assistant Professor, Department of Psychology
University of Texas at El Paso

Steffanie A. Strathdee, Ph.D.
Associate Dean of Global Health Sciences
Harold Simon Professor & Chief
Division of Global Public Health
Department of Medicine
University of California, San Diego

José Szapocznik, Ph.D.
Executive Dean for Research & Research Training
Chair, Department of Epidemiology and Public Health
University of Miami Miller School of Medicine

Yonette F. Thomas, Ph.D.
Associate Vice President for Research Compliance
Howard University, Washington, DC
Voluntary Associate Professor of Epidemiology and Public Health
University of Miami Miller School of Medicine

Avelardo Valdez, Ph.D.
Professor & Director, Center for Drug & Social Policy Research Graduate College of Social Work
University of Houston
Welcome from the Conference Chairs

On behalf of the Executive and Steering Committees of the NHSN and the Conference Planning Subcommittee, we welcome you to the 11th Annual International Conference of the NHSN. The theme of this year’s conference is Health Equities in Hispanic Populations. This conference focuses on the integration of research perspectives that can guide improvements for the health of Hispanic individuals, families, and communities. This integration should also serve to promote health equities across a broad range of minority populations and communities facing adversities. The first perspective involves examining etiologic factors – both biologic and environmental – that affect health, illness and well-being across the life span. The second perspective addresses how interventions – both preventive and treatment – can effectively take into account race, culture and context to enhance their effectiveness in Hispanic and other communities. The concluding perspective addresses how current health care reform policies are reshaping the landscape of delivery systems for prevention and treatment services and providing new opportunities to produce health equities for Hispanic populations. Throughout this conference, we address a wide range of health issues, including Drug and Alcohol Addiction, HIV, Cardiovascular Diseases, Cancer and Mental Health. We are excited to have so many distinguished plenary speakers, panelists, and presenters and encourage you to engage them in as much discussion as you can. We look forward to four days stimulating, enlightening, and interactive presentations and discussions, as well as strong networking and wholesome fun – the attributes that characterize our NHSN conferences.

C. Hendricks Brown, Ph.D.
2011 NHSN Scientific Conference Co-Chair
Professor, Department of Epidemiology & Public Health, University of Miami Miller School of Medicine (chbrown@med.miami.edu)

Dr. C. Hendricks Brown is a Professor of Epidemiology and Public Health, at the University of Miami’s Miller School of Medicine and is the department’s Interim Director of the Prevention Science and Community Health Division in that department. He also directs the Social Systems Informatics Program in the Center for Computational Science and is Adjunct Professor of Biostatistics and the Department of Mental Health at the Johns Hopkins Bloomberg School of Public Health. Since 1985 he has received NIH funding to direct the Prevention Science and Methodology Group (PSMG), a national network of over 130 scientists and methodologists working on the design of preventive field trials and their analyses, and implementation of prevention programs. Recently, his work has focused on the prevention of drug abuse, conduct disorder, depression and suicide. He also directs the NIDA funded Center for Prevention Implementation Methodology (Co-PIM) for Drug Abuse and Sexual Risk Behavior and an NIMH funded study to synthesize findings from individual-level data across multiple randomized trials for adolescent depression. Brown has been a member of the recent National Academy of Sciences/Institute of Medicine committee on prevention science, and serves on numerous federal panels, advisory boards, and editorial boards.

Yonette F. Thomas, Ph.D.
2011 NHSN Scientific Conference Co-Chair
Associate Vice President for Research Compliance, Howard University, Washington, DC (ythomas@howard.edu)

Dr. Thomas is the Associate Vice President for Research Compliance at Howard University. Prior to my joining Howard in July 2009, Dr. Thomas served as the Chief of the Epidemiology Research Branch at the National Institute on Drug Abuse (NIDA), at the National Institutes of Health (NIH). She is a Voluntary Associate Professor in the Department of Psychiatry and Behavioral Sciences and a Senior Research Fellow with the Center for Minority Health Services Research (CMHSR) within the College of Pharmacy, Nursing, and Allied Health Sciences at Howard University. In addition, she is a Voluntary Associate Professor in the Department of Epidemiology and Public Health at the Miller School of Medicine, the University of Miami. She is a social epidemiologist, with training in epidemiology, medical sociology and demography. Her primary research and publications have focused on the social epidemiology of drug abuse and HIV/AIDS and the link with Geography. Specifically, she recently co-edited a book on “Geography and Drug Addiction.” At NIDA she built a national research agenda around the role of the social environment. At the NIH she led a trans-NIH workgroup on the mapping of the social environment as it relates to the social determinants of health; and developed and stimulated a portfolio of science broadly focused on social epidemiology, genetic liability and phenotypic heterogeneity, and human development across the life course.
Scientific Program for Wednesday 24 August 2011

12:30 PM–1:00 PM BOX LUNCH PICKUP (Merrick Ballroom Foyer)

1:00 PM–6:00 PM METHODOLOGY PRECONFERENCE SESSION (Merrick Ballroom)
Statistical Methods for Evaluating Intervention Effects under Variable Implementation

INTRODUCTION
C. Hendricks Brown, Ph.D., 2011 NHSN Scientific Conference Co-Chair
Professor, Department of Epidemiology & Public Health, University of Miami Miller School of Medicine
(chbrown@med.miami.edu)

PRESENTERS
Eric C. Brown, Ph.D., Prevention Scientist, Social Development Research Group, University of Washington (ricbrown@uw.edu)

W. Alex Mason, Ph.D., Associate Director, Boys Town National Research Institute for Child and Family Studies (Walter.Mason@boystown.org)

DESCRIPTION
This half-day workshop provides an introduction to methods to analyze the effects of interventions that may vary in delivery (e.g., fidelity, adherence, quality, and dosage), or uptake (e.g., adoption, adaptation, sustainability, and exposure). Implementation of interventions is now a high priority for NIH as researchers seek to translate science into practice. Starting from a set of generic research questions that are the focus of efficacy and effectiveness research, we demonstrate the use of growth curve models to analyze longitudinal outcome data that may be mediated or moderated by variable program implementation. Throughout, we illustrate the use of these methods in the contexts of the individual, families, schools, and communities using examples from applied prevention studies.

Content:
1. Introduction to Implementation
   Program Delivery: Fidelity, adherence, dosage, quality, and dosage
   Program Uptake: Adoption, sustainability, engagement, and exposure

   The Latent Growth Curve Model
   Covariate approach for testing intervention effects
   Multiple-group approach for testing intervention effects

3. Methods for Testing Interventions with Variable Implementation
   Subgroup Analyses
   Total Sample Analyses
   Effect Coding
   Program by Implementation Interaction Effects
   Complier Average Causal Effects (CACE)

Audience:
Behavioral intervention researchers and policy makers interested in implementing prevention or treatment programs in experimental or quasi-experimental studies. Participants should have a basic understanding of ANOVA or regression techniques. It is helpful to have some statistical programming experience in packages such as Mplus or HLM but this is not required.

Objectives:
The workshop is designed to help attendees apply scientific and statistical methods to assess intervention effects in longitudinal data. These methods include the use of growth curve modeling, mediation, and moderation. Emphasis will be on how attendees can parameterize the appropriate statistical model, conduct appropriate statistical tests of intervention effects, and interpret analysis results.
Scientific Program for Thursday 25 August 2011

7:00 AM–5:00 PM REGISTRATION

7:00 AM–8:30 AM CONTINENTAL BREAKFAST (Merrick Foyer)

8:00 AM–8:15 AM WELCOMING REMARKS (Merrick Ballroom)
  Patricia E. Molina, M.D., Ph.D., Chair, NHSN
  Richard Ashman Professor & Head, Department of Physiology, Director, Alcohol & Drug Abuse Center of Excellence, Louisiana State University Health Sciences Center (pmolin@lsuhsc.edu)
  C. Hendricks Brown, Ph.D., 2011 NHSN Scientific Conference Co-Chair
  Professor, Department of Epidemiology & Public Health, University of Miami Miller School of Medicine, (chbrown@med.miami.edu)
  Yonette F. Thomas, Ph.D., 2011 NHSN Scientific Conference Co-Chair
  Associate Vice President for Research Compliance, Howard University, Washington, DC (ythomas@howard.edu)

8:15 AM–9:00 AM WELCOMING PLENARY (Merrick Ballroom)
  PRESENTER Donna Shalala, Ph.D., President, University of Miami
  TITLE “Health Care Reform as a Pathway to Health Equity.”

9:00 AM–10:15 AM PLENARY OPENING SESSION (Merrick Ballroom)
  PRESENTER Charles Rotimi, Ph.D., Director, Center for Research on Genomics and Global Health
  Senior Investigator, Inherited Disease Research Branch, Center for Research on Genomics & Global Health (CRGGH) / NIH (rotimic@mail.nih.gov)
  TITLE “Ancestry, Race and Health: What are we Learning in the Genomic Era?”
  DESCRIPTION The successful completion of the sequencing of the genomes of several human beings from different parts of the world is providing us with an unprecedented capacity to describe the pattern of human genetic variation. As our inventory of human genetic variation grows, we will understand why susceptibility to common diseases varies among individuals and populations. Insights that are likely to improve the efficacy and safety of therapeutic drugs will be gained. The growing catalog of human genetic variation data also promises to help address fundamental questions about our origins, our differences, and our similarities. In this presentation, I will provide a brief review of the current knowledge of human genetic variation and how it contributes to our understanding of human evolutionary history, group identity, and health disparities.
  Learning objectives
  1. What is human genetic variation?
  2. What is the implication of human genetic variation for health and disease?
  3. What is the implication of human genetic variation for health disparities?
  4. What is the implication of human genetic variation for variable drug response?
  5. Does the current understanding of human genetic variation support the existence of distinct human racial groups?

10:15 AM–12:15 PM ETIOLOGIES OF HEALTH DISPARITIES (Merrick Ballroom)
  DESCRIPTION This panel will provide a view of epigenetics and its significance in understanding the link between biology and environment. Most of the genetic variants that have been identified have only small effects on the risk of developing the common diseases with which they have been associated (i.e. asthma, heart disease, diabetes, addictions, etc). A large challenge remains in accounting for the rest of the heritability of the risk. At the forefront of these challenges is the environment, which may be the fulcrum balancing the effects of genetic variation with gene expression. As eloquently described by LaPlant and Nestler (2010), “epigenetics is a molecular translator that interprets diverse environmental stimuli into changes in gene expression via the regulation of chromatin structure”. Panelists will discuss how animal models can potentially inform an understanding of the role of epigenetics in disease patterns and the challenges of linking genomewide epigenetic studies to population health.
  CO-CHAIRS Yonette F. Thomas, Ph.D., Associate Vice President for Research Compliance, Howard University, Washington, DC (ythomas@howard.edu)
  PRESENTER Luisel Ricks-Santi, Ph.D., Assistant Professor, Department of Pediatrics, Howard University School of Medicine, Washington, D.C. (lricks-santi@Howard.edu)
  TITLE “The Implications of Aggressive Breast Cancer and Mutation Status in Ethnically Diverse Populations”
ABSTRACT

Breast cancer is a heterogeneous disease, composed of several subtypes, including the triple negative (TN) subtype, which is Estrogen Receptor (ER) negative, Progesterone Receptor (PR) negative, and HER2/neu negative. TN breast cancers have no targeted therapies available to them and have a worse survival compared with ER+ and PR+ breast cancer. Pre-menopausal African Americans (AAs), British black, Hispanic, and African have a higher prevalence of TN breast cancer compared to post-menopausal and Caucasian women. In fact, the TN subtype has been shown to be the most prominent in AA women <35y/o. Notably, TN breast cancer is also associated with BRCA1/2 positivity, which is traditionally thought to be rare in women of African descent. Furthermore, Phase III clinical trials are testing the efficacy of PARP-1 (poly-ADP ribose polymerase 1) inhibitors to treat BRCA1/2 + breast cancer. The purpose of the program is to present the potential reasons for breast cancer disparities and the implications of mutation status and aggressive breast cancer in minority populations.

Attendance at this presentation will enable participants to:
1. Present the potential reasons for breast cancer disparities
2. Introduce the different breast cancer molecular subtypes
3. Introduce the concept of genomic and molecular technologies as tools to reduce health disparities

PRESENTER
Carlos N. Pato, M.D., Ph.D., Associate Dean for Research Development, Professor and Franz Alexander Chair, Department of Psychiatry and the Behavioral Sciences, Keck School of Medicine at University of Southern California (pato@usc.edu)

TITLE
“The Portuguese Island Studies: Cohort Studies in the Genomic Era”

ABSTRACT

The Principal Investigators have conducted research on the genetics of schizophrenia in a well-established family based and case-control sample of Portuguese individuals for over 20 years. Briefly, subjects were ascertained as a population-based sample in the geographically-isolated and genetically-homogeneous Azores and Madeiran islands (Pato et al. 1997). These once-unpopulated islands were settled more than 500 years ago almost exclusively by the Portuguese. In this sample, a lifetime prevalence estimate of 0.228% was calculated for DSM-IV defined schizophrenia. Interestingly, familial cases accounted for 68.9% of the affected subjects and these cases had an earlier age at onset than non-familial cases (24.4 vs 27.7, respectively; p=0.02), with no influence of gender. Thus, in this population the prevalence of schizophrenia is lower than reported in other populations (typically ~1%), but occurs with much greater familiality than reported for other populations (typically ~10-15%).

The presentation is designed to help you:
1. Describe how population genetics has revealed significant replicable genetic factors in schizophrenia
2. List Copy Number Variants that have been identified related to schizophrenia
3. Consider potential roles for sequencing studies in complex diseases

PRESENTER
Ralph L. Sacco, M.S., M.D., F.A.A.N., F.A.H.A., Professor & Chairman of Neurology, Olemberg Family Chair in Neurological Disorders, Professor of Neurology, Epidemiology, and Human Genetics. Executive Director, Evelyn F. McKnight Brain Institute, Chief of Neurology, Jackson Memorial Hospital, University of Miami, Miller School of Medicine. President, American Heart Association 2010-11 (RSacco@med.miami.edu)

TITLE
“Genetic Determinants of Carotid Disease among Dominicans”

ABSTRACT

Cardiovascular disease and stroke remain major public health issues with a disproportionate impact on Hispanic populations. While our knowledge of vascular risk factors has improved, little is known regarding genetic influences. Given the underlying complexity of cardiovascular disease, evaluation of quantitative subclinical cardiovascular risk phenotypes will reduce etiologic heterogeneity and facilitate gene discovery. Candidate gene approaches have led to some results but have been difficult to replicate. Family studies among Hispanic populations provide an excellent opportunity for genetic discovery in understudied, high-risk populations. The goal of our Family Study of Carotid Atherosclerosis and Stroke is to identify genetic determinants of specific cardiovascular risk phenotypes which are precursors to cardiovascular disease. We have assembled a family study database of 1390 subjects from 100 high-cardiovascular risk Dominican families with systematic evaluations of phenotypes (carotid ultrasound and echocardiography), extensive data collection of traditional and behavioral risk factors, diet, blood and DNA stored, and a microsatellite genome wide scan at CIDR. We have established the high heritability of carotid intima media thickness (IMT) and carotid plaque and identified linkage peaks on chromosomes 7p14, 7q36, 11p15, 14q31-32 and 15q23 that warrant further study. These studies have the potential to identify novel variants underlying complex carotid phenotypes in the rapidly growing Hispanic population and help design innovative approaches to modification of risk of cardiovascular disease and stroke.

The presentation is designed to help you:
1. Review approaches to the genetic study of vascular traits
2. Understand the use of subclinical carotid measures for genetic linkage studies
3. Review potential role genetic risk factors have in future cardiovascular risk prediction and prevention
12:15 PM–2:30 PM  NETWORKING LUNCHEON (Colonnade Ballroom)

PRESENTER  Jasjit S Ahluwalia, M.D., M.P.H., M.S., Executive Director, Center for Health Equity, Associate Director, Clinical and Translational Sciences Institute (CTSI), University of Minnesota Medical School (jahluwal@umn.edu)

TITLE  “Successful Career Trajectories in Academics”

DESCRIPTION  This dynamic and interactive session provides critical information for graduate students, fellows, and junior faculty who are engaged or are developing their research career at a medical or health related institution. It is also intended to provide information to more senior researchers who are engaged in mentoring. Key issues for not only academic survival, but academic success, will be discussed at varying participant levels. This session will incorporate slides, interactive teaching, humor, and role play, to convey key points. Dr. Ahluwalia’s personal experiences as a fellow, faculty member, department chair, endowed professor, associate dean, center director, NIH study section chair, and NIH national advisory council member, will stimulate an exchange of issues and ideas. Participants will leave with resources and inspiration to confidently pursue their goals.

Attendance at this presentation will enable participants to:
1. Be able to create a one minute “elevator” description of who you are and where are you going;
2. Be able to list and describe a number of funding mechanisms, especially those from NIH;
3. Be able to outline a personal strategic career plan;
4. Be able to project confidence and proactively move yourself to go in the direction you want to go in.

2:30 PM–4:00 PM  PLENARY SESSION (Merrick Ballroom)

PRESENTER  Nora D. Volkow, M.D., Director, National Institute on Drug Abuse/National Institutes of Health

TITLE  “Opportunities in Addiction Research: Bridging the Translational Gap”

DESCRIPTION  Recent scientific advances have increased our understanding of the biological (genetic and epigenetic), developmental and environmental factors and their complex interactions, involved in drug abuse and addiction. This presentation will highlight recent findings on the consequences of acute and chronic drug exposure on epigenetic modifications, gene expression and cell function; brain circuit disruption in addiction; and factors involved in genetic vulnerability and resilience for drug abuse. In the coming years key addiction research challenges and opportunities will include the discovery of genes involved in vulnerability and resilience for drug abuse, genes that affect brain development and function and how they interact with the environment to either protect or increase drug abuse vulnerability. Emphasis will also be placed on translational research to employ state-of-the-art imaging tools that may be used as biomarkers to predict and monitor responses to treatment and on promising new advances and strategies in medications for drug abuse treatment.

Attendance at this presentation will enable participants to:
1. Obtain an understanding of the biological (genetic and epigenetic), developmental and environmental factors and their complex interactions, that are involved in drug abuse and addiction.
2. Describe some of the consequences that acute and chronic drug exposure have on; epigenetic modifications, gene expression and cell function; brain circuit disruption in addiction; and factors involved in genetic vulnerability and resilience for drug abuse.
3. Explain how translational research using state-of-the-art imaging tools will be able to help predict and monitor responses to treatment and lead to promising new advances and strategies in developing medications for drug abuse treatment.

4:00 PM–4:15 PM  TRANSITION

4:15 PM–6:15 PM  BREAKOUT SESSION 1  (Abstract Number following name pages 24-33)

SESSION ONE  International Research (Colonnade)

CHAIR  Antonio Cepeda-Benito, Ph.D., Professor of Psychology, Dean of Faculties, Texas A&M University (acb@tamu.edu)

Ian Mendez, Ph.D., Post Doctoral Fellow, Department of Neurobiology and Behavior, University of California, Irvine (imendez@uci.edu)

DESCRIPTION  In this session investigators from different disciplines will present research focusing on health issues relating to the international Hispanic population. International researchers are developing new methods and making exciting discoveries that are improving our diagnosis, treatment, and overall understanding of mental health disorders in the international Hispanic population. This session will provide a forum for national and international NHSN members to present their current internationally-focused projects in a short “datablitz” talk, which will be followed by a quick Q&A. The end of the session will be reserved for a group discussion open to any of the research presented during the session. This session will highlight NHSN’s commitment towards supporting international mental health research.
LEARNING OBJECTIVE:
1. This session will provide a forum for national and international NHSN members to present and explain at least 1 internationally-focused research project that they are currently working on.
2. The end of the session will be reserved for a group discussion aimed at comparing and critiquing current international projects. Participants are required to provide feedback on at least 2 of the talks presented at the datablitz.
3. The session will also serve to plan and design international research collaborations between international NHSN researchers. Participants of this session must pair up with at least 1 other participant in the session and discuss possible collaborative experiments.

PRESENTERS
Francisco Romero Gomez, Professor, Instituto Sobre Drogas y Conductas Adictivas, Spain
Anna Roberts, Graduate Student, Hospital Benito Menni, Spain
Jorge Ameth Villatoro Velázquez, Professor, Instituto Nacional de Psiquiatría, Mexico
María de Lourdes Gutiérrez, Graduate Student, Instituto Nacional de Psiquiatría, Mexico
Clara Feliz, Graduate Student, Instituto Nacional de Psiquiatría, Mexico
Luis Caris, Ph.D., Associate Professor, University of Chile Medical School, Chile
Julio Beharno, Researcher, Instituto sobre Alcoholismo y Farmacodependencia, Costa Rica

SESSION TWO
Negative Affective States and Addiction (Segovia)

DESCRIPTION
This breakout session will include presentations of data on addiction and co-morbidities that are defined by aversive emotional states. Dr. Scott Edwards of The Scripps Research Institute will discuss hyperalgesia in drug-dependent rodents during withdrawal from ethanol, heroin, and nicotine, as well as the role of brain corticotropin-releasing factor (CRF) systems in these hyperalgesic responses. Dr. Roberto Melendez of the University of Puerto Rico will discuss the ability of ethanol to facilitate expression of a previously acquired fear memory and impair extinction of that fear memory in rodents. Dr. Nicholas Gilpin of LSU Health Sciences Center will discuss the effects of traumatic stress, using a predator odor model in rats, on self-administration of alcohol and non-drug rewards, arousal, and mechanosensitivity.

CHAIRS
Nicholas Gilpin, Ph.D., Assistant Professor, Department of Physiology, Louisiana State University Health Sciences Center (ngipli@lsuhsc.edu)
Richard De La Garza, Ph.D., Associate Professor, Department of Psychiatry, Baylor College of Medicine (rg12@bcm.edu)

PRESENTERS
Scott Edwards, Ph.D., Research Associate, Committee on the Neurobiology of Addictive Disorders, The Scripps Institute (edwards@scripps.edu)
“Pain as a Negative Motivational State Underlying Drug Addiction” (1)

Roberto Melendez, Ph.D., Assistant Professor, Department of Anatomy & Neurobiology, University of Puerto Rico, School of Medicine (roberto.melendez2@upr.edu)
“Repeated Ethanol Administration Increases Expression of Previously Acquired Fears and Impairs Extinction” (2)

Nicholas Gilpin, Ph.D., Assistant Professor, Department of Physiology, Louisiana State University Health Sciences Center (ngipli@lsuhsc.edu)
“An Animal Model of Post-Traumatic Stress Disorder & Alcohol-Related Behaviors” (3)

SESSION THREE
Disparities in Alcohol-Related Consequences: National Studies of Hispanic Youth and Adults (Gables)

DESCRIPTION
Alcohol misuse is a contributor to the leading causes of death among adolescents, including violence, impaired driving, and unintentional injuries. The purpose of this panel is to discuss the role of alcohol use on consequences among Hispanics using national data sources. Discussion will focus on how knowledge from epidemiological studies can be applied to reduce disparities in alcohol-related consequences and other risky behaviors. This panel will be followed by another panel presentation entitled “Toward Equity in Alcohol-related Outcomes: The Role of Prevention Science”.

CHAIRS
Mildred Maldonado-Molina, Ph.D., Assistant Professor, Department of Health Outcomes and Policy and Institute for Child Health Policy, University of Florida (maldonado@ichp.ufl.edu)
Jennifer Reingle, PhD Candidate, Department of Health Outcomes and Policy and the Institute for Child Health Policy, University of Florida (jreingle1@ufl.edu)
SESSION FOUR

Towards Explaining Health Disparities in People Living with HIV: the Influence of HAART, Ethnicity, and Alcohol Consumption (De Soto)

DESCRIPTION

Despite notable gains in fighting HIV, multiple conditions have compromised our current therapeutic capabilities. First, HIV hides in sanctuaries such as the brain, where ART penetrance is limited. Second, despite effective antiretroviral therapy (viral control and even positive CD4 responses), inflammatory markers remain exceptionally high (60-150% IL-6) compared to socio-demographically matched people living without HIV. This chronic inflammatory response, however, differs across racial ethnic groups, and suggests that biological factors may be contributing to health disparities. Based on our findings we have generated a model in which HIV and alcohol activates systemic and brain cytokine signaling (TNF-alpha and IL-6) leads to increasing risks of cognitive, cardiovascular and mood disorders. Our findings highlight the importance of looking beyond external determinants, to host factors such as inflammation.

CHAIR

Maria Jose Miguez, M.D., Ph.D., Professor, School of Integrated Science and Humanity, Florida International University (marisemp01@att.net)

PRESENTERS

Robert Cook, M.D., MPH, Associate Professor, University of Florida (cookrl@phhp.ufl.edu)
“Cardiovascular Risks in People Living with HIV: The Influence of Antiretroviral Therapy, Ethnicity, and Alcohol Consumption.” (8)

Ximena Burbano, M.D., Assistant Professor, School of Integrated Science and Humanity, Florida International University (ximena.burbano@fiu.edu)
“Patterns of Health Care Services Utilization in a Cohort of People Living with HIV: Are Health Disparities Affecting HIV + Hispanics in Miami?” (9)

Robert Malow, Ph.D. Professor, School of Public Health, Florida International University (rmalow@bellsouth.net)
Rhonda Rosemberg, Ph.D., Research Assistant Professor, School of Public Health, Florida International University (rosenr@fiu.edu)
“Towards Explaining Mental Health Disparities” (10)

Maria Jose Miguez, M.D., Ph.D., Professor, School of Integrated Science and Humanity, Florida International University (marisemp01@att.net)
“Increased Risk of Cognitive Disorders Among Hispanics” (11)

SESSION FIVE

Mixed Methods Research: Integrating Quantitative & Qualitative Data for Elucidating Health Disparities (Balboa)

DESCRIPTION

Integration of multiple data streams and methods of analysis are needed to produce robust results from community-based research. The purpose of this breakout session is to provide both a conceptual and methodological framework for assessing proper integration of quantitative and qualitative data. The workshop will use as its point of reference a study that seeks to integrate quantitative (i.e. behavioral, biological, spatial, and quasi-network) and qualitative (narrative) data from a study of active drug injectors who reside in the suburbs of southwestern Connecticut. Each method will be described, but briefly, so that the workshop focuses primarily on their integration. Implications for both health disparities research and mixed methods initiatives will be considered.

CHAIR

Wilson R. Palacios, Ph.D., Associate Professor, Department of Criminology, University of South Florida (wpalacio@mail.cas.usf.edu)

PRESENTERS

Wilson R. Palacios, Ph.D., Associate Professor, Department of Criminology, University of South Florida (wpalacio@mail.cas.usf.edu)
SESSION SIX Synthesizing Findings Across Multiple Trials: Examples from the Adolescent Drug Abuse and Depression Fields (Merrick)

DESCRIPTION

The synthesis of findings across multiple intervention trials has the potential to answer important questions on comparative effectiveness. Methods beyond meta-analysis, such as integrative data analyses, have the means of answering complex research questions including: for whom interventions work (moderation) and by what mechanisms they work (mediation). This session will examine data synthesis in drug abuse and depression interventions, focusing on Hispanic adolescents. Presentations include: 1) Scientific, methodologic and practical issues in data sharing; 2) Parent and family factors related to adolescent depression and drug abuse; 3) Comparing findings for treatment of depressed, Hispanic adolescents; 4) Comparative effects of Multidimensional Family Therapy trials for drug abuse treatment among Hispanic adolescents.

CHAIR

C. Hendricks Brown, Ph.D., Professor, Department of Epidemiology & Public Health, University of Miami Miller School of Medicine (chbrown@med.miami.edu)

PRESENTERS

C. Hendricks Brown, Ph.D., Professor, Department of Epidemiology & Public Health, University of Miami Miller School of Medicine (chbrown@med.miami.edu)

Tatiana Perrino, Psy.D., Research Assistant Professor, Department of Epidemiology & Public Health, University of Miami Miller School of Medicine (tperrino@med.miami.edu)

“Scientific, Methodologic and Practical Issues in Collaborative Data Synthesis” (12)

Tatiana Perrino, Psy.D., Research Assistant Professor, Department of Epidemiology & Public Health, University of Miami Miller School of Medicine (tperrino@med.miami.edu)

“Review of Parent and Family-Based Interventions for Hispanic Adolescents” (13)

Guillermo Bernal, Ph.D., Professor, Department of Psychology, University of Puerto Rico (gbernal@ipsi.uprrp.edu)

“Toward a synthesis of trials to treat depression in Hispanic Adolescents: Review of four studies using the same treatment protocol” (14)

Craig Henderson, Ph.D., Associate Professor, Department of Psychology, Sam Houston State University (Chenderson@shsu.edu)

“Comparative Effects of Multidimensional Family Therapy Trials (MDFT) for Drug Abuse Treatment Among Hispanic Adolescents” (15)

7:00 PM–10:00 PM EARLY CAREER MIXER

Information available at registration table
Scientific Program for Friday 26 August 2011

7:30 AM–5:00 PM  REGISTRATION

8:00 AM–9:30 AM  CONTINENTAL BREAKFAST AND POSTER SESSION 1 (Colonnade Ballroom)
Posters numbered 40-79

9:30 AM–11:45 AM  NEW INVESTIGATORS IN DRUG ABUSE RESEARCH (Merrick Ballroom)

CO-CHAIRS
Laura O’Dell, Ph.D., Assistant Professor, Department of Psychology, University of Texas at El Paso
(loddell@utep.edu)

Victoria Ojeda, Ph.D., Assistant Professor, Division of Global Public Health, University of California, San Diego
(vojeda@ucsd.edu)

Mildred Maldonado-Molina, Ph.D., Assistant Professor, Department of Epidemiology and Health Policy Research, University of Florida College of Medicine
(maldonado@ichp.ufl.edu)

Nelson Tiburcio, Ph.D., Qualitative Information Director, National Development and Research Institutes, Inc., Center for the Integration of Research and Practice, New York, NY
(nelson.tiburcio@gmail.com)

Ian Mendez, Ph.D., Postdoctoral Scholar, Neurobiology and Behavior, University of California, Irvine
(imendez@uci.edu)

DESCRIPTION
The Early Career Leadership Panel will be a series of presentations from young scientists focused on the problem of Hispanic Drug use. Panelists will present data that will be prepared in collaboration with senior members of the organization. The panel is interactive and the young investigator panelists will also gain knowledge in how to prepare data for a professional presentation. The panel will be followed by a question and answer session where the learners will be able to ask pertinent questions. Each panelist will describe their findings and the implications of their work for Hispanic drug addiction. The learner is expected to leave with a better understanding of the biological or applied areas of drug abuse.

The participants will:
1. Increase their knowledge of biological effects of drug abuse (e.g., the role of stress and/or dopamine systems in animal models of drug addiction)
2. Increase their knowledge of social and environmental influences on Hispanic drug use (e.g., the role of protective factors such as parental influences, economic status, peer influences).
3. Increase their knowledge of various factors that lead to drug abuse vulnerability (e.g., gender, occupation, migration status, community factors).

The participants will present the material in a manner so that a test could be administered and the participants’ knowledge could be assessed with questions that would be answered correctly. Panelists are encouraged to present the theoretical constructs as well as the implications of their work for the learners.

PRESENTER
Rosa Solorio, M.D., M.P.H., Assistant Professor, Department of Health Services, University of Washington
(solorio@uw.edu)

TITLE
“Development of a Community Intervention to Increase Acceptability and Availability of HIV Testing among Latino MSM “ (16)

PRESENTER
Bernard Fuemmeler, Ph.D., M.P.H., Assistant Professor, Department of Community & Family Medicine, Duke University
(bernard.fuemmeler@duke.edu)

TITLE
“Correlates of Smoking Typologies in a U.S. Population-Based Sample from Adolescence to Adulthood” (17)

PRESENTER
Anna Robert, M.A., Ph.D. Candidate, Hospital Benito Menni, CASM. Barcelona, Spain
(arobertse@gmail.com)

TITLE
“Personality Risk Profile for Substance Abuse Among Adolescent Inpatients” (18)

PRESENTER
Martha B. Hinojosa, Ph.D., Postdoctoral Associate, Psychiatry Research, Baylor College of Medicine
(marthah@bcm.edu)

TITLE
“Gender Differences in Response to Bupropion in Methamphetamine Users “ (19)

PRESENTER
Ulises M. Ricoy, Ph.D., Assistant Professor, Department of Biology, Northern New Mexico College
(uricoy@nnmc.edu)

TITLE
“Distinct roles for Cav2.1-2.3 in Activity-Dependent Synaptic Dynamics” (20)

PRESENTER
Annie Whitaker, Ph.D. Candidate, Department of Physiology, Louisiana State University Health Sciences Center
(awhita@lsuhsc.edu)

TITLE
“Augmented Nitric Oxide Production in the Paraventricular Nucleus Inhibits Vasopressin Release During Hemorrhage in Acute Alcohol Intoxicated Rodents” (21)
11:45 AM–1:00 PM  GRANT WRITING SESSION (Merrick Ballroom)

PRESENTER  Joseph Frascella, Ph.D., Director, Division of Clinical Neuroscience and Behavior, NIDA/NIH (jfrascel@nida.nih.gov)

José Ruiz, Ph.D., Scientific Review Officer, Office of Extramural Affairs, NIDA/NIH (ruizjf@nida.nih.gov)

TITLE  Strategies for More Effective Grant-Writing

DESCRIPTION  The purpose of this workshop is to provide a general overview of the NIH grant-writing process with a specific discussion of suggestions and strategies for more effective grant-writing, as well as potential pitfalls. The process from the inception of the idea to the funding of an application and who should be contacted within the NIH and at which specific times will also be discussed. The process will be presented from both a program and review perspective. Welcome in this session will be general and specific questions about the grant process.

1:00 PM–2:30 PM  NATIONAL NETWORK MEMBERSHIP MEETING AND LUNCHEON (Merrick Ballroom)

CHAIR  Patricia E. Molina, M.D., Ph.D., Chair, NHSN and Membership Subcommittee, Chair Department of Physiology, Louisiana State University Health Sciences Center (pmolin@lsuhsc.edu)

2:30 PM–4:30 PM  DESIGNING INTERVENTIONS TO PREVENT AND REDUCE HISPANIC HEALTH INEQUITIES: HOW AND WHERE DO RACE, CULTURE, AND CONTEXT MATTER?  (Merrick Ballroom)

DESCRIPTION  This panel will feature three presentations discussing whether race, culture, and context should play a role in the development of behavioral and pharmacological interventions to prevent and reduce health inequities among Hispanic populations. The panelists will draw from research conducted in the drug, alcohol, and obesity fields to answer important questions such as: Does race matter in the acute subjective and physiological responses produced by cocaine? To what extent should culture and context be considered when designing behavioral interventions for Hispanic youth? How can we know if they matter or not?

CO-CHAIRS  Margarita Alegría, Ph.D., Director, Center for Multicultural Mental Health Research, Cambridge Health Alliance and Professor, Harvard Medical School (malegria@chareresearch.org)

Guillermo J. Prado, Ph.D., Associate Professor of Epidemiology and Public Health, Acting Chief, Division of Epidemiology, Acting Director, Doctorate in Epidemiology Program, University of Miami Miller School of Medicine (gprado@med.miami.edu)

PRESENTER  Richard De La Garza, Ph.D., Associate Professor, Baylor College of Medicine (rg12@bcm.edu)

TITLE  “Medications Testing for Cocaine and Methamphetamine Dependence – Does Race Matter?”

ABSTRACT  Cocaine is a highly addictive stimulant and has been the focus of numerous treatment studies over the past 30 years. Dozens of medications have been evaluated for cocaine-dependence in clinical trials, and despite these efforts not one has received FDA approval. The most promising medication evaluated for cocaine-dependence to date is Modafinil. Recent data indicate that the efficacy of Modafinil may be mediated by genetic differences among non-Hispanic and Hispanic-Caucasian individuals. In addition, it is not known to what extent, if any, race plays in the acute subjective and physiological responses produced by cocaine (implying differential susceptibility to addiction or relapse). This presentation will attempt to shed light on these intriguing issues. This workshop is designed to help you:
1. Summarize basic principles of addiction;
2. Recognize differences among pharmacological agents being investigated for addiction;
3. Describe the evidence for and against the use of Modafinil as a treatment for addiction;
4. Elucidate the potential role that race/ethnicity plays in medication response.

PRESENTER  Flavio Marsiglia, Ph.D., Director, Southwest Interdisciplinary Research Center, School of Social Work, Arizona State University (marsiglia@asu.edu)

TITLE  “To adapt or not to adapt, that is the question...”

ABSTRACT  This part of the presentation will focus on the impact of the sociocultural context of the southwest US on intervention research. It will review immigration history, current immigration, acculturation, and the strong American Indian presence. This part of the panel presentation is designed to help you:
1. Increase your knowledge on how cultural and social context influences the design and evaluation of prevention and treatment interventions with Latino youth and families;
2. Consider if cultural adaptation is necessary or even possible when designing, implementing and testing prevention and treatment interventions with Latino communities;
3. Become more familiar with key factors associated with cultural adaptation such as within group diversity, recruitment, retention, sustainability, cost-effectiveness, and generalizability;
4. Evaluate the possibility of applying a bottom-up approach when conducting intervention research projects; starting with the unique needs and assets of communities;
5. Become familiar with the lessons learned about cultural adaptation in intervention research at the Southwest Interdisciplinary Research Center (SIRC).
PRESENTER  Alexander Ortega, Ph.D., M.P.H., Director, Institute for Survey Research (ISR), Professor of Public Health and Psychiatry & Behavioral Sciences, Temple University (anortega@temple.edu)

TITLE  “Family and Neighborhood Interventions to Reduce Heart Disease Risk in East L.A.”

ABSTRACT  East L.A., California is an urban community with high rates of obesity-related chronic diseases. East L.A. is over 96% Latino; 85% of whom have Mexican ancestry. The Center for Population Health and Health Disparities, a $10 million P50 center funded by NHLBI aims to reduce cardiovascular disease risk in this underserved area. To accomplish this objective, the center has three integrated, complementary projects, two shared resources cores and a Training and Career Development Program. We use a community-based participatory approach to implement family and neighborhood environment interventions, along with the collection of physiological data that will examine risk in individuals and across generations. This presentation will describe the community, its health issues and the center’s scientific and training aims.

This presentation will help you:
1. Learn about food deserts in Latino communities
2. Learn how to apply multi-level interventions using a community-based participatory approach
3. Observe a collaboration between social and basic scientists to develop innovative interventions to reduce obesity-related chronic disease in a Latino community

4:30 PM–4:45 PM  TRANSITION & NETWORKING

4:45 PM–6:45 PM  BREAKOUT SESSION 2

SESSION SEVEN  Basic Science Datablitz (Segovia)

DESCRIPTION  There are two goals for this breakout session: 1) to share the latest basic research findings with the NHSN community, and 2) to begin to organize NHSN basic scientists into a workgroup. For the first goal, NHSN members will share and discuss their latest discoveries in the basic sciences with other scientists sharing similar interests. For the second goal we will begin steps to organize a Basic Science Workgroup within NHSN to facilitate communication among scientists during the intervals between NHSN meetings. Ongoing communication throughout the year will help to launch collaborations among NHSN basic scientists. All interested NHSN scientists are encouraged to attend, especially graduate students and postdocs.

CHAIRS  Keith Trujillo, Ph.D., Professor, Department of Psychology, Director, Office for Biomedical Research and Training California State University, San Marcos (keith@csusm.edu)
Edward Castañeda, Ph.D., Professor & Chair, Department of Psychology, Co-Director, Hispanic Health Disparities Research Center, University of Texas, El Paso (ecastaneda9@utep.edu)

SESSION EIGHT  Investigation of HIV Viral Proteins: Molecular and Behavioral (Gables)

DESCRIPTION  Characteristics of HIV viral proteins will be presented from the cellular level by looking at the role of T cell activation in anti-HIV immunity as well as the interaction of HIV proteins and cembranoid 4R, a non-toxic compound derived from the tobacco leaf. Lastly, evidence will be presented to display the effects of HIV viral proteins at the behavioral level

CHAIR  Sulie L. Chang, Ph.D., Director of Institute of NeuroImmune Pharmacology, Seton Hall University (Sulie.Chang@shu.edu)
Abraham Bautista, Ph.D., Director, Office of Extramural Activities; Executive Secretary, National Advisory Council, National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health (bautista@mail.nih.gov)

PRESENTERS  Lena Al-Harthi, Ph.D., Professor, Rush Medical College, Rush University (Lena_Al-Harthi@rush.edu)
“Molecular Interactions Between B-Catenin/TCF-4 Signaling and HIV: A Model for HIV Pathogenesis in the CNS” (22)

Yong-Hui Zheng, Ph.D., Assistant Professor, Department of Microbiology and Molecular Genetics, Michigan State University (zhengyo@msu.edu)
“Host Restriction of HIV-1 Replication” (23)

Richard J. Noel Jr., Ph.D., Associate Professor, Department of Biochemistry, Ponce School of Medicine (moel@psm.edu)
“HIV-1 Nef Expression in Astrocytes Impairs Spatial Memory” (24)

Sulie L. Chang, Ph.D., Professor, Director, Institute of NeuroImmune Pharmacology, Seton Hall University (Sulie.Chang@shu.edu)
“The Age and Alcohol By Volume-Dependent Differential Effects of Acute Binge Drinking” (25)
SESSION NINE  
Toward Equity in Alcohol-Related Outcomes: The Role of Prevention Science  (Colonnade)

DESCRIPTION  
Research suggests that alcohol misuse is related to a number of risky behaviors among adolescents, including physical aggression, HIV, and delinquency, among other risky behaviors during adolescence. The purpose of this panel is to discuss the innovative approaches to design highly efficacious, effective, and efficient prevention interventions. Discussion will focus on the prevention of alcohol, HIV, aggression, and delinquency among Hispanic youth. There will be ample discussion on approaches to the development of improved prevention programming for alcohol use and related risk behaviors will follow.

CHAIR  
Mildred Maldonado-Molina, Ph.D., Assistant Professor, Department of Epidemiology and Health Policy Research, University of Florida College of Medicine  (maldonado@ichp.ufl.edu)

PRESENTER  
Linda M. Collins, Ph.D., Director, The Methodology Center, Professor, Human Development and Family Studies, Professor, Statistics, The Pennsylvania State University  (lmcollins17@gmail.com)
“The Multiphase Optimization Strategy (MOST): Building Highly Efficacious, Effective, and Efficient Interventions to Improve Minority Health”  (26)

Stephanie Staras, Ph.D., Assistant Professor, Department of Health Outcomes and Policy University of Florida  (sas@ehpr.ufl.edu)
“Alcohol and HIV Prevention Among Urban Adolescents”  (27)

David Cordova, Ph.D., Postdoctoral Fellow, University of Miami  (dcordova@med.miami.edu)
“Alcohol, Rule Breaking and Aggressive Behaviors among Hispanic Adolescents”  (28)

SESSION TEN  
Understanding Racial/Ethnic Disparities in Patterns of Mental Health Care: Episodes of Care and What They Tell Us About Reducing Disparities  (De Soto)

DESCRIPTION  
In this panel, three papers discuss racial/ethnic disparities in episodes of mental health care. The first paper introduces the idea of an episode of mental health care, arguing that understanding the episode of care provides more useful information to policymakers than cross-sectional analyses typically conducted in the literature. The second paper reports results from one of the only studies known to identify racial/ethnic disparities in mental behavioral health care use for the elder population 60 years and over. The third paper identifies disparities in patterns of care for individuals that have had an acute mental health care visit (ER or inpatient visit). The results identify that disparities exist in initiation and quality of mental health care for African-Americans and Latinos and point to specific segments of care (i.e., post-ER care, initiation of care, care for the elderly) in which policies could be usefully targeted.

CHAIR  
Margarita Alegría, Ph.D., Director, Center for Multicultural Mental Health Research, Cambridge Health Alliance and Professor, Harvard Medical School  (malegria@charesearch.org)

PRESENTERS  
Benjamin Cook, Ph.D., M.P.H., Senior Scientist, Center for Multicultural Mental Health Research, Cambridge Health Alliance  (bcook@charesearch.org)
“Assessing Differences Among Racial/Ethnic Groups in Episodes of Mental Health Care”  (29)

Daniel Jimenez, Ph.D., Research Fellow, Dartmouth Medical School  (daniel.e.jimenez@Dartmouth.edu)
“Racial/Ethnic Disparities in Mental Health Care among the Elder Population”  (30)

Nicholas Carson, M.D., Instructor, Center for Multicultural Mental Health Research, Cambridge Health Alliance  (NCARSON@charesearch.org)
“Assessing the Quality of Mental Health Treatment for Racial/Ethnic Minorities After Inpatient and Emergency Mental Health Treatment”  (31)

SESSION ELEVEN  
Latino Family Health Disparities in Emerging Immigrant Communities: Stress Pathways and Promising Interventions  (Merrick)

DESCRIPTION  
Many states with little experience regarding large scale immigration have newly established Latino emerging immigrant communities (EICs). Little is known about child and family functioning within these communities. While acculturation processes have been linked to vulnerability for Latino adolescent substance use in numerous studies, most of this research has been conducted within contexts that have well-established Latino communities. Our research indicates potentially unique effects on Latino family behavioral health of living in states with EICs that have intense contextual stressors and few stress buffers. Because stress processes are often difficult to measure, particularly in marginalized populations, we will discuss our integration of stress biomarkers and self-report methodologies to better model stress pathways and effects on behavioral health. Further, we will discuss culturally-adapted parenting and youth interventions with Latino families in EICs. We will describe findings related to the influence of culturally specific factors in understanding healthy adjustment for immigrant Latino families, and document emerging findings related to the efficacy of two interventions in EICs in terms of parent and adolescent outcomes.
SESSION TWELVE

Health Disparities among Latino Migrants: HIV, STI and Substance Use (Balboa)

DESCRIPTION

There are over 8 million undocumented Latinos in the U.S. and, despite efforts to restrict illegal immigration, this number is growing by about 500,000 each year. The Latino population, the nation’s largest minority, is disproportionately affected by AIDS, HIV and the rates of Chlamydia, Gonorrhea, and Syphilis are 2-4 times higher among Latinos compared to non-Latino whites. Heterosexual HIV transmission is 2.7 times more common among Latino men compared to Caucasian men. Less is known about the highly mobile and less often counted group of Latino migrants. The purpose of this break out session is to discuss health disparities among Latino migrants in terms of HIV, STI and substance use. Presentations will examine migrants in post-Katrina New Orleans, Louisiana and Tijuana, Mexico.

CHAIR

Patty Kissinger, Ph.D., Professor, School of Public Health, Tulane University (kissing@tulane.edu)

PRESENTERS

Patty Kissinger, Ph.D., Professor, School of Public Health, Tulane University (kissing@tulane.edu)
“Patterns and Predictors of HIV/STI and Drug Risk Among Latino Migrant Men in Post-Katrina New Orleans” (32)

Alice Cepeda, Ph.D., Assistant Professor & Associate Director University of Houston Department of Sociology & Center for Drug and Social Policy Research (acepeda2@uh.edu)
“Fumando La Piedra: Crack Use & High Risk Sexual Behaviors among Latino Immigrant Day Laborers in Post-Katrina New Orleans” (33)

Victoria D. Ojeda, Ph.D., M.P.H., Assistant Professor, Division of Global Public Health, Univ. of California, San Diego (vojeda@ucsd.edu)
“Reflections on Drug Use in a Post-Deportation Setting: The Case of Mexican IDUs” (34)
Scientific Program for Saturday 27 August 2011

8:00 AM–9:00 AM DEVELOPING AND DIVERSIFYING NIH REVIEW PANELS

DESCRIPTION
This panel discussion will include NIH reviewers, program and review officers and will focus on the following:
1. Why be a reviewer and how to get more out of the review service
2. Overview of the different review formats, and reviewer roles
3. Overview of NIH’s expectations from the reviewers.
4. Volunteering and Positioning yourself for selection as a ‘Reviewer’
5. Preparing for a Review Meeting – Administrative Considerations (Use of IAR Commons; COI forms, Timely travel arrangements, Dealing with emergencies)
6. Preparing for a Review Meeting – Scientific Considerations (Grant Reading; Preliminary Critique Preparations/scoring; Presentation at the meeting & final scoring; editing critiques)
7. The Federal Advisory Committee Act (FACA) and its role in maintaining oversight.

CO-CHAIRS
Abraham P. Bautista, Ph.D., Director, Office of Extramural Activities, Executive Secretary, National Advisory Council, NIAAA/NIH
Philippe Marmillot, Ph.D., Scientific Review Officer, Office Of Extramural Activities / Review Branch, NIAAA/NIH
Ranga V. Srinivas, Ph.D., Chief, Extramural Projects Review Branch, Office of Extramural Activities, NIAAA/NIH

8:30 AM–10:00 AM CONTINENTAL BREAKFAST AND POSTER SESSION 1 (Colonnade Ballroom)
Posters numbered 81-115

10:00 AM-12:00 AM IMPLICATIONS OF HEALTH CARE REFORM FOR POLICY AND INTEGRATED CARE (Merrick Ballroom)

DESCRIPTION
On March 23, 2010, President Obama signed into law the Patient Protection and Affordable Care Act (referred to as the Affordable Care Act or ACA) setting in motion the most important changes to the U.S. health care system in decades. This new, landmark health care reform law makes health insurance coverage more accessible and affordable for individuals, families, and the owners of small businesses and includes many opportunities as well as challenges for health and behavioral health providers as well as consumers of these services. Providers, consumers, researchers and advocates must be aware of how the changes brought up by health care reform will affect individuals and must be ready to take full advantage of the new opportunities. This panel will summarize key ACA provisions that are most relevant to behavioral health care including substance abuse-related services and how these provisions are being implemented at the federal, state and local levels. Some implications of the ACA on coverage expansions for behavioral health care and opportunities for Latino consumers and their families will be described. Finally, anticipated changes in the delivery system (including preparing a diverse workforce, the integration of behavioral health into primary care, and the focus on prevention) that will result by the implementation of health care reform that are most likely to affect Latinos with substance abuse and mental disorders will be discussed.

CO-CHAIRS
Sergio Aguilar-Gaxiola, M.D., Ph.D., Professor of Clinical Internal Medicine & Director Center for Reducing Health Disparities (CRHD) University of California, Davis (sergio.aguilar-gaxiola@ucdmc.ucdavis.edu)
William Vega, Ph.D., Provost Professor and Director, Roybal Institute, University of Southern California (williaav@usc.edu)

PRESENTER
Ken Thompson, M.D., Psychiatry, Western Psychiatric Institute Clinic, Pittsburgh, PA. (kthomp@pitt.edu)

“Needle in a Hay Stack or the Elephant in the Room?: Opportunities for Transforming Behavioral Health Policy and Practice in Health Care Reform”
ABSTRACT The Patient Protection and Affordable Care Act has numerous provisions that both directly and indirectly address substance abuse and mental health concerns. From expanding access to shifting who pays what for whom the provisions of the Act promise to reshape both financial access to health care and the politics of payment. The design of care is also being reshaped as efforts to “bend the cost curve” emphasize the provision of primary care and population health. The aspirations of the legislation follow general trends in thinking and experience in health policy garnered around the United States and the rest of the world. Understanding these underlying elements helps to lay bare the very real but easily missed opportunities for improving behavioral health contained in the Act. This presentation will consider these global trends in health policy, their impact on the Act and the opportunities they bring to addressing behavioral health concerns.

After this presentation participants will
1. Be aware of the less obvious objectives encompassed in health care reform that might impact on the health and health care of latinos
2. Comprehend the growing global understanding of what is necessary to achieve population health
3. Appreciate the central role of behavioral health in all aspects of population health.

PRESENTER David Pating, M.D., Chief, Addiction Medicine, Kaiser San Francisco Medical Center Chemical Dependency Recovery Program, CA. (David.Pating@kp.org)
“Integrated Primary Care Substance Abuse Services in a Large HMO”

ABSTRACT This presentation examines the impact and challenges of integrating substance abuse services into Primary Care within a large HMO. Positive outcomes, including reduced medical costs and improved quality, are achievable if common challenges are overcome. This presentation will review common implementation challenges, especially on the eve of health care reform, and their relevance to researchers.

By the end of the session, participants will:
1. Recognize the impact and challenges of incorporating substance abuse services into Primary Care within a large HMO
2. Summarize the positive outcomes of integrating substance abuse services into Primary Care within HMO’s.
3. Compare the challenges of implementing substance abuse services into Primary Care within HMO’s as it applies to researchers.

DISCUSSANT Erick G. Guerrero, Ph.D., Assistant Professor, University of Southern California, School of Social Work (erickgue@usc.edu)

12:00 PM-12:15 PM BOX LUNCHES (Merrick Foyer)
12:15 AM-1:45 PM CLOSING PLENARY (Merrick Ballroom)

PRESENTER Guilherme Borges, M.D. Instituto Nacional de Psiquiatria Ramon de la Fuente Muñiz Calzada Mexico (guibor@imp.edu.mx)
“The Mexico-US Migration and Mental Health Study: Results on the Impact of Mexico-US Migration on Substance Use and Suicidality”

DESCRIPTION Epidemiologic research has consistently found lower prevalence of alcohol and drug use disorders among Hispanic immigrants to the US than among US-born Hispanics. Increase in stressors and in the prevalence of psychiatric disorders may also impact suicidality (suicide ideation, plans and attempts) among immigrants, but the findings here are more controversial. Recent research has begun to examine how these changes occur in the process of assimilation in modern societies with complex migration patterns. We aimed to study immigration, US nativity, and return migration as risk factors for alcohol, drug use and suicidality among people of Mexican origin in both the US and Mexico. Results from nationally representative surveys in the United States (2001–2003; n= 1208) and Mexico (2001–2002; n=5782) will be presented. This unique trans-national dataset allows testing the prediction that substance use disorders and suicidality will be higher among migrants and among US-born Mexican-Americans in comparison with the Mexican source population. Avenues for future research and bi-national collaboration in these areas will be proposed.

2:00 PM CONFERENCE ADJOURNS
Speaker Biographies

W. Alex Mason, Ph.D.

W. Alex Mason, Ph.D. is the Associate Director of the Boys Town National Research Institute for Child and Family Studies and has held both research and faculty positions in the School of Social Work at the University of Washington. His research focuses on the developmental etiology and family-centered prevention of behavior disorders and related problems among adolescents and young adults. He also has interests in longitudinal and intervention-related methods and analytic techniques. Dr. Mason is the Principal Investigator of a National Institute on Drug Abuse-funded randomized trial testing the efficacy of a parent-training program for improving the transition to high school among high-risk 8th-grade students and their families. His publications include both etiological and intervention-related analyses, appearing in journals such as Prevention Science, Drug and Alcohol Dependence, and the Journal of Child Psychology and Psychiatry.

Eric C. Brown, Ph.D.

Eric C. Brown is a Research Assistant Professor with the Social Development Research Group at the University of Washington’s School of Social Work. Currently, Dr. Brown is the Principal Investigator of the Steps to Respect project, which is a school-randomized controlled trial examining the efficacy of a school-based bullying prevention program; is a co-investigator of a NIMH funded study examining the adequacy of Maximum Individualized Change Analysis for assessing the effects of individually-tailored interventions; and is a research scientist on the Community Youth Development Study, which is a community-randomized trial of the Communities That Care prevention system. Dr. Brown earned his Ph.D. from the University of South Florida in Educational Research, Measurement, and Design with a concentration in the prevention of children’s mental health problems. His research interests include the evaluation and development of prevention, mental health, and child welfare service systems.
Donna E. Shalala, Ph.D.

Donna E. Shalala became Professor of Political Science and President of the University of Miami on June 1, 2001. President Shalala has more than 30 years of experience as an accomplished scholar, teacher, and administrator. Born in Cleveland, Ohio, President Shalala received her A.B. degree in history from Western College for Women. One of the country's first Peace Corp Volunteers, she served in Iran from 1962 to 1964. She earned her Ph.D. degree from The Maxwell School of Citizenship and Public Affairs at Syracuse University. She has held tenured professorships at Columbia University, the City University of New York (CUNY), and the University of Wisconsin - Madison. She served as President of Hunter College of the City University of New York from 1980 to 1987 and as Chancellor of the University of Wisconsin-Madison from 1987 to 1993. During her tenure, UM has solidified its position among top U.S. research universities. Momentum: The Campaign for the University of Miami, one of the first billion-dollar capital campaigns completed in the United States, raised $1.4 billion in private support for the university's endowment, academic and research programs and facilities. In 1993 President Clinton appointed her U.S. Secretary of Health and Human Services (HHS) where she served for eight years, becoming the longest serving HHS Secretary in U.S. history. At the beginning of her tenure, HHS had a budget of nearly $600 billion, which included a wide variety of programs including Social Security, Medicare, Medicaid, Child Care and Head Start, Welfare, the Public Health Service, the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and the Food and Drug Administration (FDA). At the end of her tenure as HHS Secretary, The Washington Post described her as "one of the most successful government managers of modern times." She served in the Carter administration from 1977-80 as Assistant Secretary for Public Development and Research at the U.S. Department of Housing and Urban Development. She is a Director of the Lennar Corporation and Mednax, Inc. In 2007, President George W. Bush handpicked Shalala to co-chair with Senator Bob Dole the Commission on Care for Returning Wounded Warriors, to evaluate how wounded service members transition from active duty to civilian society. In 2009 she was appointed chair of the Committee on the Future of Nursing at the Institute of Medicine of the National Academy of Sciences. President Shalala has more than four dozen honorary degrees and a host of other honors, including the 1992 National Public Service Award, the 1994 Glamour magazine Woman of the Year Award; in 1992, Business Week named her one of the top five managers in higher education; in 2005, she was named one of "America's Best Leaders" by U.S. News & World Report; in 2008, President Bush presented her with the Presidential Medal of Freedom, the nation's highest civilian award; and in 2010 she received the Nelson Mandela Award for Health and Human Rights, which recognizes individuals for outstanding dedication to improving the health and life chances of disadvantaged populations in South Africa and internationally. She has been elected to the Council on Foreign Relations; National Academy of Education; the National Academy of Public Administration; the American Academy of Arts and Sciences; the American Philosophical Society; the National Academy of Social Insurance; the American Academy of Political and Social Science; and the Institute of Medicine of the National Academy of Sciences.

Charles Rotimi, Ph.D.

Charles Rotimi, PhD, a genetic epidemiologist and a biochemist, is a senior investigator in the Inherited Disease Branch of the NHGRI intramural program. He is the Director of the Center for Research on Genomics and Global Health (CRGGH). The mission of this new trans-NIH center is to advance research into the role of culture, lifestyle, genetics and genomics in disease etiology and population differences in disease susceptibility and variable drug response. Dr. Rotimi develops large-scale genetic epidemiology studies that explore the patterns and determinants of common complex diseases in human populations with particular emphasis on populations of the African Diaspora. As a senior investigator and director of the CRGGH, Dr. Rotimi leads a team of researchers across multiple disciplines including medicine, epidemiology genetics/genomics, statistics and informatics. His team published the first genome-wide scan for hypertension and blood pressure in African Americans and for type 2 diabetes in West Africans. His lab contributes to the global understanding of human genetic variation and its implication for differential susceptibility to diseases, variable drug response and human evolutionary history. He is the founding and current president of the African Society of Human Genetics.
Luisel Risks-Santi, Ph.D.

Dr. Luisel Risks-Santi was born in Puerto Rico. She received a B.S. in Molecular Biology at Hampton University and was the recipient of a Minority Access to Research Career fellowship. While at Georgetown University, on a tumor biology pre-doctoral fellowship, she received a PhD in Tumor Biology. During her studies there, she was also the recipient of a Department of Defense Breast Cancer Pre-doctoral fellowship. Currently, Dr. Risks-Santi is a cancer genomics researcher at the Howard University Cancer Center and National Human Genome Center where, she is making an impact on how cancer is prevented, diagnosed, and treated and has been the recipient of a Cancer Genomics fellowship through the Howard-Johns Hopkins Partnership in Cancer Research. She has also received an Early Career Scientist Award, an NIH K12, through the Georgetown-Howard Universities Center for Clinical and Translational Sciences Program. In addition to engaging in multiple areas of basic laboratory and clinical cancer research, Dr. Risks-Santi is also enthusiastic about health literacy. She has developed a family health history program to educate community members on the importance of collecting family health history to make important decision about one’s health. In her spare time, Dr. Risks-Santi has been using her cancer biology background in service to her community by volunteering with several community based organizations to provide education about cancer screening recommendations, in addition to how to perform breast self-exams. Interacting directly with the community has inspired her to become a greater advocate for cancer screening especially in communities where cancer incidence, morbidity, and mortality is higher.

Carlos Pato, M.D.

Carlos Pato and his wife and collaborator Michele Pato have an ongoing interest in the genetics of complex phenotypes such as psychotic disorders, schizophrenia and bipolar disorder, as well as obsessive-compulsive disorder. Trying to understand the genetics of these complex diseases has been extremely difficult, given inherent genetic variability and variability in the disorders themselves. That is why our team decided to focus our efforts on a population strategy, one designed to “decrease the amount of variability in our study population.” The Azores and Madeira island archipelagos’ landforms that did not have a native population, and so were settled virtually from scratch by the Portuguese in the 1400s, were an ideal setting for our work. These are isolated islands that were populated by design, and you can go back 500 years to look at the families there and look over the centuries how new families added to this genetic pool. Basically, we’re just taking advantage of a natural history experiment that goes back 500 years. Today, we have about 3,500 subjects that we continue to follow over time. We’re tracking their histories, following their families and attempting to predict who is at risk; and see how that genetic risk, combined with non-genetic variables, together determine whether a child goes on to develop one of these illnesses. We are also pioneering techniques for using microarray gene expression studies to pursue potential diagnostic and screening tests for these mental-health disorders and have also been looking at whole-genome linkage studies and family-based association studies to better understand the genetics of schizophrenia and bipolar disorder.

Ralph L. Sacco, M.D., M.S., F.A.H.A., FA.A.N

Ralph L. Sacco, MD, MS, is the Chairman of Neurology, Olembeg Family Chair in Neurological Disorders, Miller Professor of Neurology, Health & Epidemiology, Neurosurgery and Human Genetics at the Miller School of Medicine, University of Miami and Chief of the Neurology Service at Jackson Memorial Hospital. A graduate of Cornell University, and a cum laude graduate of Boston University School of Medicine, he also holds a master’s in epidemiology from Columbia University School of Public Health. Dr. Sacco completed his neurology residency training and postdoctoral training in stroke and Epidemiology at Columbia Presbyterian in New York. He was previously Professor of Neurology, Chief of the Stroke and Critical Care Division, and Associate Chairman at Columbia University. Principal Investigator of the Northern Manhattan Study (NOMAS), as well as co-investigator of multiple other NIH grants, Dr. Sacco has published extensively in the areas of stroke prevention, treatment, risk factors and stroke recurrence. He has been the recipient of numerous awards including, the Feinberg Award for Excellence in Clinical Stroke, the Chairman’s Award from the American Heart Association and the Javits Award in Neuroscience. Dr. Sacco is a fellow of both the Stroke and Epidemiology Councils of the American Heart Association and the American Academy of Neurology. He is a member of the American Association of Physicians and the American Neurological Association. He just finished his term as president of the American Heart Association, continues his service as Immediate past-president of the AHA.
Jasjit S. Ahluwalia, M.D., M.P.H., M.S.

Dr. Jas Ahluwalia has devoted the past 19 years to improving the health of underrepresented minorities. He began at Emory University and in 1997, joined the University of Kansas as the Sosland Family Professor and Chair of the Department of Preventive Medicine. In 2005, Dr. Ahluwalia joined the University of Minnesota as the founding Director for the Office of Clinical Research. In the summer of 2009, he received the NIH Comprehensive Centers of Excellence in Health Disparities and Minority Health and Health Disparities. Dr. Ahluwalia is currently the PI for a NIH P60 center grant, senior mentor and Co-Investigator on six NIH R01s grants and is mentoring eight faculty, a postdoctoral fellow, and two students. He has received $20 million in funding as a Principal Investigator and over $75 million as a co-investigator. His research work has focused on nicotine addiction and smoking cessation in African American smokers by way of conducting clinical trials, secondary analysis, qualitative research, and clinical epidemiology research.

Nora Volkow, M.D.

Nora Volkow, M.D., became Director of the National Institute on Drug Abuse NIDA) at the National Institutes of Health in May 2003. NIDA supports most of the world's research on the health aspects of drug abuse and addiction. Dr. Volkow’s work has been instrumental in demonstrating that drug addiction is a disease of the human brain. As a research psychiatrist and scientist, Dr. Volkow pioneered the use of brain imaging to investigate the toxic effects of drugs and their addictive properties. Her studies have documented changes in the dopamine system affecting the actions of frontal brain regions involved with motivation, drive, and pleasure and the decline of brain dopamine function with age. She has also made important contributions to the neurobiology of obesity, ADHD, and the behavioral changes that occur with aging. Dr. Volkow was born in Mexico, attended the Modern American School, and earned her medical degree from the National University of Mexico in Mexico City, where she received the Premio Robins award for the best medical student of her generation. Her psychiatric residency was at New York University, where she earned the Laughlin Fellowship Award as one of the 10 Outstanding Psychiatric Residents in the USA. Dr. Volkow spent most of her professional career at the Department of Energy’s Brookhaven National Laboratory (BNL) in Upton, New York, where she held several leadership positions including Director of Nuclear Medicine, Chairman of the Medical Department, and Associate Director for Life Sciences. In addition, Dr. Volkow was a Professor in the Department of Psychiatry and Associate Dean of the Medical School at the State University of New York (SUNY)-Stony Brook. Dr. Volkow has published more than 440 peer-reviewed articles and more than 75 book chapters and non-peer reviewed manuscripts, and has also edited three books on the use of neuroimaging in studying mental and addictive disorders. During her professional career, Dr. Volkow has been the recipient of multiple awards, including her selection for membership in the Institute of Medicine in the National Academy of Sciences and the International Prize from the French Institute of Health and Medical Research for her pioneering work in brain imaging and addiction science. She was recently named one of Time Magazine’s “Top 100 People Who Shape our World” and was included as one of the 20 people to watch by Newsweek magazine in its “Who’s Next in 2007” feature. She was also included in Washingtonian Magazine’s 2009 list of the “100 Most Powerful Women” and named “Innovator of the Year” by U.S. News & World Report in 2000.

Joseph Frascella, Ph.D.

Joseph Frascella, Ph.D. is currently the Director of the Division of Clinical Neuroscience and Behavioral Research at the National Institute on Drug Abuse (NIDA) and heads a broad drug abuse and addiction program of translational research and research training in clinical neuroscience, human development, and behavioral treatment. Prior, he served for several years as the Chief of the Clinical Neurobiology Branch as well as the program director of NIDA’s basic pain, basic research training, and human neuroimaging programs. He serves on many committees and workgroups both within NIDA and across the NIH. Before joining NIDA, Dr. Frascella directed a neurophysiology research program at the Armed Forces Radiobiology Research Institute in Bethesda, Maryland, and prior to that he served on the faculty of the Department of Psychology at Brown University. He received an A.B. in Biopsychology from Hamilton College, and a M.Sc. and a Ph.D. degree in Experimental Psychology/Neuroscience from Brown University.
Patricia Molina, M.D., Ph.D.

Dr. Patricia E. Molina is the head of the Department of Physiology at Louisiana State University Health Sciences Center in New Orleans. As department head, her responsibilities are to ensure that the discipline of physiology is taught to medical, dental, nursing, allied health and graduate students. As a researcher, Molina’s research is focused on the mechanisms involved in the accelerated muscle wasting associated with AIDS, and how chronic alcohol consumption and cannabinoid use affects the course and progression of AIDS-associated wasting, immune and neurobehavioral function; and on neuroendocrine mechanisms that modulate response to traumatic injury. This research is funded by the Department of Defense, NIDA, NIAAA and the Louisiana State University Health Sciences Center Alcohol Research Center. In addition, she leads a team of a dozen scientists, technicians and students to discover how alcohol and drug abuse impact metabolic, endocrine, and immune responses to acute and chronic diseases. Born and raised in El Salvador, Dr. Molina always knew she wanted to be a scientist. She completed medical school at the Universidad Francisco Marroquin in Guatemala. In 1990 she moved to the U.S. and obtained a Ph.D. in Physiology at Louisiana State University. Molina recalls how being a woman in a male-dominated field has been a challenge throughout her career. “To overcome the inherent biases in the system one must find mentors and colleagues that trust and believe in what you can achieve,” Molina states. “Their support has been incredibly important in my being able to succeed.” In having three professors as her mentors, she recalls how she “got unsurpassable training in biomedical research and in teaching at LSU. My love for the institution and for the city were huge, I felt at home here,” she said. Just as she had the support and guidance of mentors, Molina aims to make an impact for today’s young Latinas. Today, she devotes her time in mentoring K-12 faculty and students. “Many of the mentees are underrepresented minorities that are insecure as they try to find a niche within the scientific community. Many are elementary school students that had never met a Latina scientist or had never seen a laboratory,” she states. “The possibilities that can be opened as a mentor for these students are countless.”

Richard De La Garza, Ph.D.

Richard De La Garza completed his Ph.D in neuroscience at the University of Texas Medical Branch, followed by postdocs at Harvard Medical School and Yale University School of Medicine. At present, Dr. De La Garza is an Associate Professor with tenure in the Menninger Department of Psychiatry and Behavioral Sciences at the Baylor College of Medicine. Dr. De La Garza conducts studies in humans to investigate the safety and efficacy of medications for methamphetamine and cocaine addiction. Dr. De La Garza is a member of the Board of Directors and President-elect for the College on the Problems of Drug Dependence.

Flavio F. Marsiglia, Ph.D.

Dr. Flavio F. Marsiglia is the Distinguished Foundation Professor of Cultural Diversity and Health at the Arizona State University (ASU) School of Social Work and is the Director of the Southwest Interdisciplinary Research Center (SIRC). SIRC is an exploratory center of excellence on minority health and health disparities research and training funded by the National Institute on Minority Health and Health Disparities (NIMHD) of the National Institutes of Health (NIH). His research focuses on culturally specific substance abuse interventions to prevent or reduce health disparities in partnership with ethnic minority communities of the Southwest US. In addition, he leads an international scholars’ exchange program at SIRC and conducts research and training in partnership with colleagues in Mexico, Spain and Tanzania. Dr. Marsiglia has authored and co-authored numerous peer-reviewed journal articles and book chapters and is the co-author of a book entitled Diversity, Oppression and Change: Culturally Grounded Social Work.
Alex Ortega, Ph.D., M.P.H.

Alex Ortega is the Director of the Institute for Survey Research (ISR) and Professor of Public Health and Psychiatry and Behavioral Sciences at Temple University. He is the founding Director and Principal Investigator of the UCLA Center for Population Health and Health Disparities, which aims to reduce obesity-related chronic diseases in East L.A. Prior to his appointment at Temple, he held faculty positions at UCLA and Yale and was Director of the UCLA Institute for Social Research (ISR). Ortega holds an MPH in Epidemiology and Biostatistics from Boston University and a PhD in Epidemiological Science from the University of Michigan.

David Pating, M.D.

David Pating, MD, is a psychiatrist and Chief of Addiction Medicine at Kaiser Medical Center, San Francisco. As a member of The Permanente Medical Group, Dr. Pating is the Northern California Regional Chair of its Addiction Medicine and the Chemical Dependency Quality Improvement Committees. Dr. Pating is an Assistant Clinical Professor at UCSF School of Medicine and site-director for its VAMC-Kaiser fellowship in Addiction Medicine. Dr. Pating has been appointed to California’s prestigious Mental Health Services Oversight and Accountability Commission (Proposition 63) and is a Board member of the American Society of Addiction Medicine. He has consulted to SAMHSA, the Medical Board of California and the 9th Circuit Court of Appeals on integrated behavioral care, professional impairment and prevention.

Kenneth Thompson, M.D.

Kenneth S. Thompson, M.D. is a public service psychiatrist who has focused his career on community/population health and improving psychiatric services. He is an Associate Professor of Psychiatry and Public Health at the University of Pittsburgh. Until recently he was the Medical Director of the Center for Mental Health Services in the Substance Abuse and Mental Health Services Administration in the US Department of Health and Human Services, where he provided expert psychiatric consultation to public policy formation and implementation. In particular he has been engaged nationally in improving mental health care, developing and implementing recovery oriented services and evidence based service, integrating primary care and behavioral health services and creating a population health approach to mental health. He has also had a leading role in developing SAMHSA’s initiatives in global health. He now serves as the Chief Medical Officer for Recovery Innovations, a non-profit behavioral health services provider that focuses on leading the development of recovery oriented services. Dr. Thompson has worked in a clinical capacity across the spectrum of community mental health and health settings. He also has extensive background in mental health services research, psychiatric pedagogy, psychiatric administration and managed care. A native of Pittsburgh, Dr Thompson was educated at Kenyon College and Boston University School of Medicine, which he attended as a National Health Service Corps Scholar. He did his psychiatric residency at Jacobi Hospital/Albert Einstein College of Medicine in New York, where he was the senior chief resident. He did a two year post doc in mental health services research at Yale on a National Research Service Award. After two years on the Yale faculty, serving as the PI on an NIAAA services research grant providing treatment for homeless men and assessing the outcome, he joined the Pitt faculty in 1991. In 2005 he became the Co-Chief Medical Director of the Harrisburg State Hospital, helping to guide its closure and following its patients in the community. In 2007 he joined CMHS/SAMHSA. Dr Thompson is married to Andrea Fox MD who is an internist/geriatrician and director of an FQHC in Pittsburgh. They have three children.
**Erick Guerrero, Ph.D.**

Erick Guerrero, Ph.D. joined the USC School of Social Work in 2009 as a postdoctoral fellow and in 2010 he was promoted to tenure track Assistant professor. Originally from Mexico City, Dr. Guerrero spent the last 13 years in Chicago, where he completed his doctoral education at the University of Chicago, School of Social Service Administration. His research interests include the organization, structure and effectiveness of behavioral health services tailored to racial and ethnic minority populations. Dr. Guerrero’s current work focuses on the implementation of linguistic and culturally responsive practices in substance abuse treatment. He has received numerous emerging scholar awards and his work has been funded by federal and institutional grants. Professor Guerrero has taught courses on organizational theory and policy implementation, as well as in research methods for social workers. Professionally, Dr. Guerrero has over 13 years of clinical experience offering bilingual-bicultural clinical services in psychiatric and substance abuse treatment settings and he has consulted for national and international organizations on diversity management and program evaluation.

**Guilherme Borges, Dr. Sc.**

Doctor Guilherme Borges is a Psychologist (UNAM-Mexico) with a residency in Public Health (Oswaldo Cruz Foundation-Brazil) and received his Dr.Sc. in Epidemiology in 1996 at the Instituto Nacional de Salud Publica (Mexico), with a doctoral affiliation at Johns Hopkins School of Public Health and postdoctoral affiliation at Harvard Medical School. He is a senior researcher at the Instituto Nacional de Psiquiatria Ramon de la Fuente and a Professor at the Universidad Autonoma Metropolitana. He has mentored 33 students from undergraduate and graduate areas of Psychology, Epidemiology, Social Medicine and Public Health. He has published over 215 journal articles and chapter books, both in Spanish and English, in the area of substance abuse and psychiatric epidemiology. Dr. Borges serves as a member of the Substance-Related Disorder Work Group for the DSM-V, the American Psychiatric Association, he is part of the Expert Group Core Member in the Alcohol Use Expert Group, Global Burden of Diseases, Injuries, and Risk Factors Study (GBD Study), and member of the Reference Group on Alcohol Epidemiology-World Health Organization. He has received several awards, including the 2009 Fred L. Soper Award for Excellence in Health Literature, Pan American Health and Education Foundation-Pan American Health Organization.
Breakout Session Abstracts
Listed by number in the Program

1. Pain as a Negative Motivational State Underlying Drug Addiction
Scott Edwards, Ph.D., The Scripps Research Institute

Corticostriatal stress disorder shows co-morbidity with alcohol (ethanol) dependence but little is known about ethanol's interaction with traumatic memories. An animal model commonly used to study traumatic memories is auditory fear conditioning, where a tone is paired with shock to elicit freezing responses. Using rats, we sought to determine the effect of repeated versus acute ethanol administration on the expression and extinction of a previously acquired fear memory. Rats were conditioned according to an acute single injection of 1.5 g/kg ethanol or saline-vehicle. 48-hrs later (i.e., fear re-test), both groups showed equivalent freezing, indicating acute ethanol failed to disrupt fear expression. Both groups then received repeated saline or ethanol injections for 5 days (once daily) and were re-tested and extinguished 48 hrs later. Repeated ethanol treated rats showed significantly elevation in the expression of fear and they took longer to extinguish their fear memory. Although the ethanol group eventually extinguished, they showed increased freezing on the following day, indicating impaired recall of extinction. These results suggest that repeated ethanol exposure after a traumatic event might augment fear reactions to conditioned stimuli, and reduce response to extinction-based therapy for PTSD. Future studies will examine the role of prefrontal-amygdala glutamate in mediating ethanol-induced fear memory. Funded by MH058883 and MH081975 to GJQ, and the RISE Program of UPR-RCM.

LEARNING OBJECTIVES:
1. Describe the basic procedural paradigm to study fear memory and extinction in rodents.
2. Explain the differences observed between acute versus repeated ethanol treatment on the expression of fear, extinction, and recall.
3. What brain region(s) and neurotransmitter may be potentially involved in mediating ethanol-induced fear memory.

2. Repeated Ethanol Administration Increases Expression of Previously Acquired Fears and Impairs Extinction
Robert Melendez, Ph.D., Quinones-Laracuente K, and Quirk GJ, Departments of Psychiatry and Anatomy & Neurobiology, University of Puerto Rico, School of Medicine, San Juan PR

PTSD and alcoholism exhibit a high degree of co-morbidity in humans and have partially overlapping symptomatological profiles. The aim of this study was to examine the effects of traumatic stress on alcohol-related behaviors. Male Wistar rats were trained to respond for 10% w/v ethanol vs. water on a continuous reinforcement (FR-1) schedule in a two-lever operant situation. Rats were divided into two groups (conditioned & controls) matched for chamber preference and ethanol responding. Conditioned rats were exposed to neutral odor in non-preferred context and predator odor in preferred context (CS+), then tested 24 hrs later for context avoidance (CPA). Conditioned rats were divided into two groups (avoiders & non-avoiders) based on avoidance of CS+ relative to baseline (avoiders defined by > 10-s decrease in time spent in CS+). Rats were tested for operant ethanol responding on days 2, 5, 8 and 11 post-conditioning. Subsequently, rats were re-exposed twice to either predator odor alone or CS+ alone, but never both together, and tested for CPA and alcohol drinking. Rats were also tested for compulsion of alcohol drinking (willfulness to consume quinine-flavored alcohol) and mechanosensitivity (von Frey test). Relative to non-avoiders and controls, avoiders exhibited consistently higher avoidance of the predator-paired chamber, higher operant alcohol responding, and more compulsive-like alcohol drinking. Furthermore, in the presence of predator odor, all rats exhibited allodynia, and this effect was greater in avoiders. This study presents a novel animal model for assessing the effect of a traumatic stressor and the maladaptive response to that stressor on subsequent alcohol drinking and related behaviors and may be useful for examining the underlying neural mechanisms of excessive alcohol consumption in humans with PTSD. This study was supported by NIAAA grant AA018400.

LEARNING OBJECTIVES:
1. Describe the rationale for a proposed link between alcohol drinking and post-traumatic stress disorder (PTSD)
2. Explain the basic design of an animal model of PTSD and alcohol drinking
3. Describe the relationship in humans and animals between response to maladaptive stress response and startle response, mechanosensitivity, compulsivity of alcohol drinking, and sensitivity to non-drug reward

3. An Animal Model of Post-Traumatic Stress Disorder & Alcohol-Related Behaviors
Nicholas Gilpin, Ph.D., Department of Physiology, Louisiana State University Health Sciences Center

PTSD and alcoholism exhibit a high degree of co-morbidity in humans and have partially overlapping symptomatic profiles. The aim of this study was to examine the effects of traumatic stress on alcohol-related behaviors. Male Wistar rats were trained to respond for 10% w/v ethanol vs. water on a continuous reinforcement (FR-1) schedule in a two-lever operant situation. Rats were then exposed to two contexts that differed on two sensory modalities (visual & tactile stimuli). Rats were divided into two groups (conditioned & controls) matched for chamber preference and ethanol responding. Conditioned rats were exposed to neutral odor in non-preferred context and predator odor in preferred context (CS+), then tested 24 hrs later for context avoidance (CPA). Conditioned rats were divided into two groups (avoiders & non-avoiders) based on avoidance of CS+ relative to baseline (avoiders defined by > 10-s decrease in time spent in CS+). Rats were tested for operant ethanol responding on days 2, 5, 8 and 11 post-conditioning. Subsequently, rats were re-exposed twice to either predator odor alone or CS+ alone, but never both together, and tested for CPA and alcohol drinking. Rats were also tested for compulsion of alcohol drinking (willfulness to consume quinine-flavored alcohol) and mechanosensitivity (von Frey test). Relative to non-avoiders and controls, avoiders exhibited consistently higher avoidance of the predator-paired chamber, higher operant alcohol responding, and more compulsive-like alcohol drinking. Furthermore, in the presence of predator odor, all rats exhibited allodynia, and this effect was greater in avoiders. This study presents a novel animal model for assessing the effect of a traumatic stressor and the maladaptive response to that stressor on subsequent alcohol drinking and related behaviors and may be useful for examining the underlying neural mechanisms of excessive alcohol consumption in humans with PTSD. This study was supported by NIAAA grant AA018400.

LEARNING OBJECTIVES:
1. Describe the rationale for a proposed link between alcohol drinking and post-traumatic stress disorder (PTSD)
2. Explain the basic design of an animal model of PTSD and alcohol drinking
3. Describe the relationship in humans and animals between response to maladaptive stress response and startle response, mechanosensitivity, compulsivity of alcohol drinking, and sensitivity to non-drug reward
4. Gender Differences in the Direct and Indirect Effects of Multi-Level Risk and Protective Factors on Trajectories of Violence among Hispanic Adolescents

Jennifer Reingle, Department of Health Outcomes and Policy, University of Florida, School of Medicine

The current study sought to estimate trajectories of violent behavior and evaluate the direct and indirect effects of contextual factors among Hispanics, stratified by gender. Relying on data from 3,719 Hispanic adolescents surveyed as a part of the National Longitudinal Study of Adolescent Health (Add Health), violence trajectories were estimated using group-based trajectory modeling.

The results identified three groups of violence trajectories for both males and females (non-violent, desisters, and escalators) and there were considerable gender differences in the direct and indirect effects of risk and protective factors on violent behavior. Study limitations and policy implications are discussed.

LEARNING OBJECTIVES:
1. Recognize the shape and number of violence trajectories among Hispanic adolescents;
2. Discuss the risk factors for violence;
3. Detail gender differences in trajectory shape;
4. Understand how contextual risk factors are mediated through proximal risks;
5. Discuss the gender differences in risk factors for violence.

5. Are Latinos more prone to DWI?

Eduardo Romano, Ph.D., Pacific Institute for Research and Evaluation

Early research suggested that Latino drivers were more involved in impaired driving than their white counterparts. Current research, though, is yielding a complex picture with apparently contradictory results. Differences by country of origin, age, gender, marital status -with most DWI offenders being young, male, and single- are among the factors that most contribute to such heterogeneity. There is also some evidence that acculturation and time since immigration may play a role on alcohol impairment, although the evidence is far from clear. Another reason that adds to the observed heterogeneity is methodological bias (e.g., the way the prevalence of DWI among Latino drivers is estimated). While the former has been largely ignored, the goal of this presentation is to review the extant literature, and suggest lines of research as well as approaches to policy-making.

LEARNING OBJECTIVES:
1. Identify factors that make Latino’s drivers more/less prone to DWI than non-Latino drivers;
2. Identify variations in the prevalence of DWI among different Latino subgroups;
3. Discuss the validity of broad concepts such as “Latino’s driving”;
4. Discuss the usefulness of focusing on DWI problems for different Latino’s subgroups.

6. Identifying Patterns of Risky Drinking and Injuries Using the ICARIS-2 Dataset: Are There Additional Risks for Hispanics?


Injuries (including unintentional injuries, violence, and suicide) are the leading cause of death for adults up to 44 years old and incur major economic costs to society. One risk factor often linked to injuries is alcohol use; evidence suggests that patterns of drinking and injuries vary by age. It is also important to see whether these patterns vary by race or ethnicity as research has found higher rates of drinking and alcohol dependence among Hispanics compared to non-Hispanic Whites. Person-centered approaches can identify types or subgroups of individuals with specific patterns of alcohol use and injury behaviors, which may be useful for tailoring prevention and intervention efforts.

We examined co-occurring patterns of alcohol use and injuries using the CDC’s Second Injury Control and Risk Survey (ICARIS-2), a nationally representative, cross-sectional dataset that surveyed households during 2001-2003. We sought to answer three research questions: 1) Are there underlying subgroups of drinking and injuries? 2) Are there age differences in subgroup membership? 3) Are there additional risks for Hispanics? Multiple-group latent class analysis using age as a grouping variable and Hispanic ethnicity as a covariate will be conducted using SAS PROC LCA on the ICARIS-2 dataset (n=9,684). Our findings suggest increasing heterogeneity in patterns of risk for Hispanics in the older age groups. These patterns of increasing risks by age groups are contrary to findings based on the aggregate sample and underscore the need to examine differences in patterns of drinking and injuries by race and ethnicity.

LEARNING OBJECTIVES:
1. Observe analysis of results from a multiple-group latent class analysis with a covariate;
2. Compare differential risks of membership in drinking and injury subgroups based on age;
3. Compare differential risks of membership in drinking and injury subgroups based on Hispanic ethnicity.

7. Is the “Prevention Paradox” Applicable to Alcohol Problems across Hispanic National Groups?

Raul Caetano, M.D., Ph.D., University of Texas Southwestern

The “prevention paradox”, a notion that most alcohol-related problems are generated by non-heavy drinkers, has significant relevance to public health policy. This presentation examines the notion that most alcohol problems among four U.S. Hispanic national groups are attributable to moderate drinkers. Data were collected in face to face interviews from a probability sample of 5,200 Hispanic respondents 18 years of age and older in Miami, New York, Philadelphia, Houston and Los Angeles. Alcohol consumed in the past year (bottom 90% vs. top 10%), binge drinking (binge vs. no binge), and a four-way grouping defined by volume and binge criteria were used. Alcohol-related harms included 14 social and dependence problems. Results indicated that drinkers at the bottom 90% of the distribution are responsible for 56% to 73% of all social problems, and for 55% to 73% of all dependence-related problems reported, depending on Hispanic national group. Binge drinkers are responsible for the majority of the social problems (53% to 75%) and dependence-related problems (59% to 73%), also depending on Hispanic national group. Binge drinkers at the bottom 90% of the distribution are responsible for a larger proportion of all social and dependence-related problems reported than those at the top 10% of the volume distribution. Cuban Americans are an exception. The prevention paradox holds when using volume-based risk groupings and disappears when using a binge-drinking risk grouping. Binge drinkers who drink moderately on an average account for more harms than those who drink heavily across all groups, with exception of Cuban Americans.

LEARNING OBJECTIVES:
1. Describe the characteristics and importance of the distribution of alcohol problems across U.S. Hispanic national groups;
2. Apply knowledge about the prevalence of alcohol problems across Hispanic national groups to the development and design of prevention interventions;
3. Identify what are the most effective prevention intervention strategies with U.S. Hispanics.
8. Cardiovascular Risks in People Living with HIV: The Influence of HAART, Ethnicity, And Alcohol Consumption

Robert Cook, M.D., Department of Epidemiology and Biostatistics & of Medicine, University of Florida

As HIV infection has shifted from an acute to a chronic illness, cardiovascular disease has become responsible for a growing proportion of morbidity and mortality among people living with HIV (PLWH). The objectives of this longitudinal study were to measure cardiovascular risk factors (fasting lipids, homocysteine, IL-6) at baseline and after 6 months on therapy and to determine whether these factors changed over time, and whether they varied by race/ethnicity, and alcohol consumption. Study participants included 88 hazardous and 76 non-hazardous drinkers starting antiretroviral therapy (ART). Participants provided blood samples at each visit. Hazardous alcohol consumption was defined as exceeding weekly recommended limits (>7 drinks/week and >14 drinks per week in females and males, respectively). Overall, lipid profiles changed after ART initiation, with an increase in cardiovascular risks after starting ART. Analyses indicated that Hispanic participants with hazardous drinking exhibited the worst cardiovascular risk profile, followed by African Americans (regardless of drinking status). The results also suggest and interactive effect of alcohol and race on ART-associated cardiovascular risks. Clinicians should be aware that both alcohol and ART can worsen cardiovascular risk profiles, and that minority individuals might be at especially high risk.

LEARNING OBJECTIVES:
1. Identify markers of cardiovascular risk in persons with HIV infection
2. Explain how cardiovascular risk markers vary according to antiretroviral therapy, alcohol consumption, and race/ethnicity.

9. Health Care Disparities in People Living with HIV

Ximena Burbano, M.D. School of Integrated Science and Humanity, Florida International University

Despite substantial advances in HIV care and antiretroviral therapy (ART), People living with HIV (PLWH) still exhibit increased morbidity and mortality risks when compared to the general population. However, this burden is not equally distributed among Hispanics, African Americans, and Caucasians PLWH. Differences in health care for diverse populations may be caused by numerous reasons: underlying disease processes, individual choice, systemic barriers, or a combination or several factors. The purpose of our analyses is to describe differences in access to health care to help identify disparities in health outcomes that may be responsive to improvements in health care for a Hispanic population of PLWH in Florida. This study examined factors associated with health service utilization in a sample of poor PLWH with sexual and substance use risk behaviors. Retrospective data was collected between 2000 and 2011. Access and adherence to antiretroviral medications was described. Primary outcomes included utilization of emergency services and hospital admissions. Number, days of hospitalization and discharge diagnoses were registered. For emergency room visits, causes of consultations as well as number of visits were analyzed for every racial group included in the study. The study findings indicate a decreased likelihood of health care services utilization among Hispanics after controlling for social determinants and prescription rates of antiretroviral therapy (ART). Our data indicated that Hispanics living with HIV were twice as likely as African Americans to exhibit moderate to severe depression. These findings are of significant concern given that these mental health conditions have an influence on morbidity and mortality. Our data have identified biological reasons as predisposing factors. Specifically, a significantly high inflammatory response was observed in Hispanics that correlates with depression, particularly with non-somatic symptoms. Other factors may include frequent disruption and distress due to migration, low education, or chronic conditions that are prevalent among Hispanic families. However, most available research lacks a biopsychosocial framework that would provide a comprehensive understanding of Hispanic mental health risks, reflecting the heterogeneity of Hispanic populations. The identification and intervention need to become a research and health services priority, with the goal of tailored, culturally serviceable, and pragmatic tools and programs.

LEARNING OBJECTIVES:
1. To describe baseline characteristics of a cohort of South Floridians living with HIV and their health care utilization patterns in an open access health care system.
2. To identify differences in health care use patterns in Hispanics living with HIV.
3. To inform researchers and decision makers of areas of greatest need.

10. Towards Explaining Mental Health Disparities

Robert Malow, Ph.D., Public Health, Florida International University

Despite significant advances in the medical treatment of people living with HIV (PLWH), comorbidities continue to compromise their functioning and quality of life. One such comorbidity is depression, which has been reported in 20% to 37% of PLWH. After controlling for social determinants and prescription rates of antiretroviral therapy (ART), our data indicated that Hispanics living with HIV were twice as likely as African Americans to exhibit moderate to severe depression. These findings are of significant concern given that these mental health conditions have an influence on morbidity and mortality. Our data have identified biological reasons as predisposing factors. Specifically, a significantly high inflammatory response was observed in Hispanics that correlates with depression, particularly with non-somatic symptoms. Other factors may include frequent disruption and distress due to migration, low education, or chronic conditions that are prevalent among Hispanic families. However, most available research lacks a biopsychosocial framework that would provide a comprehensive understanding of Hispanic mental health risks, reflecting the heterogeneity of Hispanic populations. The identification and intervention need to become a research and health services priority, with the goal of tailored, culturally serviceable, and pragmatic tools and programs.

LEARNING OBJECTIVES:
1. Determining the prevalence of depression in a multi-ethnic cohort of persons with HIV infection;
2. Determine if prevalences of mood disorders varied by race/ethnicity;
3. Identify potential factors triggering mood disorders.

11. Increased Risk of Cognitive Disorders Among Hispanics

Maria Jose Miguez, M.D., Ph.D., School of Integrated Science and Humanity, Florida International University

Despite advances in antiretroviral therapy (ART) with improved on viral control and CD4 measures, the prevalence of HIV-associated cognitive impairment remains high and affects up to 80% of people living with HIV (PLWH). Consequently, it has become evident that to treat HIV-associated neurocognitive disorders, it is important to identify and correct any additional conditions that may adversely affect the brain. We are actively following a large cohort, in which we are examining the effects of race, alcohol and inflammation because information regarding these critical factors is either scarce or nonexistent. For example to date, much of the evidence that pro-inflammatory cytokines in the periphery are related to neurocognitive function derives from the pre-cART era. In addition, to the best of our knowledge, prior studies have not considered the potential effect of hazardous alcohol use (HAU) on current models. Lastly, prior work on racial and ethnic disparities has been limited by the scarcity of national samples that include a large numbers of non-English-speaking minority respondents. With this study we took advantage of a multiethnic cohort with a significant number of minority participants and we describe these findings in the context of current trends in the field.

LEARNING OBJECTIVES:
1. Determining the prevalence of cognitive disorders in a multi-ethnic cohort of persons receiving antiretroviral therapy;
2. Identify potential factors of cognitive disorders vary by race/ethnicity;
3. Identify potential factors triggering these disorders.
12. Scientific, Methodologic and Practical Issues in Collaborative Data Synthesis

C. Hendricks Brown, Ph.D., and Tatiana Perrino, Psy.D., Department of Epidemiology & Public Health, University of Miami Miller School of Medicine

The synthesis of findings across multiple intervention trials has the potential to answer important questions on comparative effectiveness. Methods beyond meta-analysis, such as integrative data analyses, have the means of answering complex research questions including: for whom interventions work (moderation) and by what mechanisms they work (mediation). This Session will examine data synthesis in drug abuse and depression interventions, focusing on Hispanic adolescents. Presentations include: 1) Scientific, methodologic and practical issues in data sharing; 2) Review of family-based interventions for Hispanic adolescents; 3) Comparing findings for treatment of depressed, Hispanic adolescents; 4) Comparative effects of Multidimensional Family Therapy trials for drug abuse treatment among Hispanic adolescents.

LEARNING OBJECTIVES:
1. Identify certain benefits and challenges of existing methods of data synthesis
2. Describe the practical challenges involved in promoting data sharing among researchers
3. Describe the Collaborative Data Synthesis approach to conducting a data synthesis project

13. Review of Family-Based Interventions for Depression and Substance use Among Hispanic Adolescents

Frank Bandiera, Department of Epidemiology & Public Health, University of Miami Miller School of Medicine

Hispanics are a large growing population and are the largest ethnic minority group in the United States. Further, Hispanics tend to be younger than other ethnic groups. Family-based risk factors for adolescent depression include acculturation, parental depression, sibling conflict or bullying, parental criticism, and inter-parental conflict, separation, or divorce. Family-based preventive and treatment interventions among Hispanics include parent-adolescent interaction therapy and parental skills training. These interventions have been efficacious in improving family functioning, which in turn can prevent the occurrence of depression or treat existing depression. They have also demonstrated efficacy to improve a wide range of other outcomes including substance use and risky sex behavior. Moderators of family-based preventive and treatment interventions may include child characteristics such as age, gender, acculturation, depressive history, and other medical conditions; parent characteristics such as parental depression and social support; and family characteristics such as parent-child interaction. Mediators of family-based preventive and treatment interventions may include parenting behavior, family environment, social isolation, and peer relationships.

LEARNING OBJECTIVES:
1. List risk and protective factors for Hispanic adolescent depression
2. Discuss efficacious preventive and treatment interventions for Hispanic adolescent depression
3. List moderators and mediators of interventions for Hispanic adolescent depression

14. Toward a Synthesis of Trials to Treat Depression in Hispanic Adolescents: Review of Four Studies Using the Same Treatment Protocol.

Guillermo Bernal, Ph.D., and Carmen L. Rivera-Medina, Department of Psychology, University of Puerto Rico

The presentation will examine four studies on the treatment of adolescent depression with Hispanics. Three studies were conducted in Puerto Rico (Rossello & Bernal, 1999; Rosella, Bernal & Rivera-Medina, 2008; and Bernal et al., in progress) and the fourth in Colorado (Shirk, Kaplinski, and Gudmundsen, 2009). All of these used the same CBT protocol that targeted depressed adolescents. The studies in Puerto Rico were efficacy trials. The study in Colorado was an open trial using pre to post evaluations in a school setting that employed a benchmarking analytic strategy. The presentation will review the findings of the four studies in terms of primary (depression symptoms) and secondary (family functioning, self-concept, and externalizing behaviors) outcomes. Furthermore, we expect to examine the role of perceived family conflict, family involvement, and parental symptoms in the treatment of depressed adolescents. The discussion will center on indentifying some of the challenges of synthesizing findings across clinical trials.

LEARNING OBJECTIVES:
1. Identify the commonalities of four CBT studies on the treatment of depression
2. Identify the primary and secondary outcomes of CBT studies for depressed adolescents
3. List methodological challenges in the synthesis of outcomes across clinical trials

15. Comparative Effects of Multidimensional Family Therapy Trials (MDFT) for Drug Abuse Treatment Among Hispanic Adolescents

Craig Henderson, Ph.D., Department of Psychology, Sam Houston State University
Paul Greenbaum, Ph.D., Department of Child and Family Studies, Louis de la Parte Florida Mental Health Institute, University of South Florida

Despite well-documented health disparities experienced by Hispanic youth, substance abuse researchers have only addressed the most elementary questions regarding the effectiveness of evidence-based treatments (EBTs) for this population. Although several recent reviews have indicated that some EBTs are effective with substance abusing, Hispanic populations, fundamentally, the question of whether EBTs are equally beneficial for Hispanic youth remains unanswered because most studies lack adequate statistical power to detect either ethnicity or gender by treatment interaction effects. Curran et al. (2008) and Bauer and Hussong (2009) have introduced promising methods for integrating data from numerous longitudinal studies, even when the observed outcome measures for a construct vary across studies and are measured using different scaling. Integrative Data Analysis (IDA) offers many advantages over existing methods such as meta-analysis. In particular, IDA offers increased statistical power for testing important research questions such as the one we propose above and broader psychometric assessment of key outcome variables. The presentation will: (a) outline a rationale for using IDA methods to combine data across trials, and contrast it with existing methods, (b) discuss a sequential methodological approach for conducting IDA analyses (IRT-based two-step procedure and Moderated Nonlinear Factor Analysis; Bauer & Hussong), and (c) present

LEARNING OBJECTIVES:
1. Participants will be exposed to the theory and implementation of Integrative Data Analysis and its advantages over traditional methods such as meta-analysis.
2. Participants will see how IDA is used to analyze data from numerous randomized controlled trials.
3. Participants will learn about the effectiveness of Multidimensional Family Therapy for Hispanic adolescents in comparison to typical treatments used in practice.

Rosa Solorio, M.D., M.P.H., Jane Simoni, Ph.D, and Beti Thompson, University of Washington

Current HIV prevention interventions have failed to engage Latinos, who are diagnosed with HIV at a rate three times that for non-Hispanic Whites and tend to be diagnosed later. To decrease HIV transmission, the Center for Disease Control (CDC) recommends early identification and treatment of HIV. Using a community-based participatory research approach, the University of WA based-PI partnered with a local community-based organization (i.e., Entre Hermanos), to design an intervention to increase HIV testing among Latino men who have sex with men (MSM). Sixty semi-structured in-depth interviews were conducted to assess barriers and facilitators associated with HIV testing. The interview assessed the following domains: individual factors, health system factors, and counseling and testing factors. The qualitative interview data was used to develop a program that includes a storyboard script for a DVD that contains a peer model, storytelling and a customized marketing strategy to promote HIV testing among Latino MSM at entertainment venues. The conceptual framework for this approach is based on marketing principles, including the 4 Ps (i.e., product, place, price, promotion), and the Health Belief Model and aims to promote the benefits from timely HIV detection, instill in participants accurate perceptions of HIV susceptibility and knowledge about HIV infection and reduce fear and stigma from HIV testing. Formative research, in the form of ten focus groups has been conducted to culturally-tailor the developed script for Latino MSM. An iterative process of questioning, analysis and verification was used. Only 50% of the study participants had ever undergone HIV testing. Among those tested, two-thirds did so due to a doctor’s recommendation. The major barriers to HIV testing included a lack of knowledge about the benefits from timely HIV detection, fear of testing positive, HIV-related stigma, denial of HIV risk (i.e. often due to stigma deflection) and confidentiality concerns. Many MSM perceive that testing HIV positive is the equivalent of a death sentence and therefore delay or avoid testing. Due to confidentiality concerns, many MSM indicate a preference for HIV testing sites that do not have Latino staff. The qualitative data was used to develop a storyboard script to promote HIV testing among Latino MSM. The script was tested with 10 focus groups, modified based on feedback from each group and then finalized. The finalized storyboard script aims to meet the desires of the target population. The developed intervention (i.e. the product) is positioned as an outreach program that promotes sexual health among Latino MSM by providing HIV testing in an accepting environment (i.e., the place is an entertainment venue) that provides social support and connections to needed health services. The intervention uses a marketing mix to reduce the price of HIV testing. The intervention includes a young Latino MSM who uses storytelling and the cultural elements of personalismo and simpatia to describe his experiences with HIV testing (i.e., peer tests negative). The peer models the desired behavior (i.e., HIV testing) and thereby promotes HIV testing. He describes the benefits from timely HIV detection and ways to overcome barriers to testing. He prepares viewers for HIV testing by sharing advice. In the last two focus groups, the Latino MSM have responded favorably to the storyboard script and over 60% report to having intentions to seek HIV testing in the next 6 months. The study findings indicate that the iterative focus group process was successful in culturally-tailoring the script for Latino MSM and in increasing acceptability of HIV testing. For the next phase of this research, we plan to translate the developed storyboard script into a DVD, with assistance from a production company and other marketing and communication experts. Following production, we will conduct a pilot randomized controlled trial to test the DVD at entertainment venues catering to Latino MSM (i.e., to facilitate availability of HIV testing) in Seattle, WA.

17. Correlates of Smoking Typologies in a U.S. Population-Based Sample from Adolescence to Adulthood

Bernard Fuemmeler, Ph.D., M.P.H.; Krista W. Ranby, Ph.D.; Scott H. Kollins, Ph.D., M.S.; Chongming Yang, Ph.D.; and Marcella H. Boynton, Ph.D., Duke University; Trenette Clark, Ph.D., The University of North Carolina at Chapel Hill; Marissa Strou, B.S.; and Kolin Clark, B.A.; and F. Joseph McClernon, Ph.D., Duke University

Smoking prevalence has declined in the past 40 years, but certain segments of the population continue to smoke at various levels. Given the considerable societal and personal costs of smoking, characterizing the various typologies of smoking behavior is critically important in order inform etiologic models and prevention efforts. The purpose of this study was to describe temporal patterns and correlates of smoking typologies from early adolescence (age 13 years) to adulthood (age 32 years) in a U.S. population-based sample. The study sample consisted of a longitudinal cohort of 12,289 adolescents from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of adolescents. Respondents completed in-home surveys on four separate occasions from 1995 to 2009. The mean age of the participants in the four waves of data collection was 15.6, 16.2, 23.0, and 28.9 years, respectively. Participants responded to questions about their smoking behaviors, whether their primary caregiver smoked, and the depressive symptoms at the first wave. Also included in these data were information about state-level variables such as, tobacco marketing policies, and percent of adolescents or adult in the population that smoked. At wave 4 a number of health indicators were assessed including, an assessment of hypertension, history of being diagnosed with anxiety or depression, perceived stress, and depressive symptoms. A cohort sequential design where developmental age is the repeated measure, rather than wave, was employed. This allowed for estimating trajectories of smoking typologies from age 13 to 32 years. A two-part zero-inflated Poisson latent curve growth mixture was used to estimate smoking onset and identify smoking typologies based on number of cigarettes smoked. Five smoking typologies were identified based on chronicity of smoking and labeled as: non-smokers, chippers, early onset mild users, early onset moderate users and late onset heavy users. Females, blacks and Hispanics were less likely to be in the heavier smoking groups. Having friends who smoked and a caregiver who smoked increased the likelihood of being in any of the smoking groups. Depressive symptoms only increased the likelihood of being in heavier smoking groups. A higher prevalence of adult smoking in the state was associated with being in any smoking typology. The prevalence of class 1 hypertension increased in dose-dependent manner among the groups. The prevalence in the late onset heavy use group was 34%, which was significantly higher that of the non-smoker group (22.5%). The percentages of those with a history of depression and anxiety were also higher in the heavier smoking groups. Perceived stress and depressive symptoms were higher in heavier smoking groups. The findings of this study suggest a strong influence of social norms on smoking typologies, both at the individual level as well as at the societal level. The increased prevalence of health problems is evidence that these typologies are meaningful classes of smokers. Continued work is needed to identify ways to reduce smoking in the population.
19. Gender Differences in Response to Bupropion in Methamphetamine Users

Martha B. Hinojosa, Ph.D., James J. Mahoney, III, M.A.; Richard De La Garza, II, Ph.D.; and Thomas Newton, M.D., Baylor College of Medicine

Gender differences in substance abuse have been a topic of interest for addiction researchers. Methamphetamine abuse is a growing problem for both males and females, and while a great deal of time, effort, and money has been devoted to medications testing, an efficacious treatment has not yet been identified. Bupropion has been effectively used in the treatment of nicotine dependence and depression, and is known to inhibit the reuptake of dopamine (DA) and norepinephrine. On the basis of its neurochemical effects, bupropion was identified as a potential treatment for methamphetamine addiction. The primary aim of this study was to investigate gender differences in subjective and physiological responses to bupropion treatment in non-treatment seeking methamphetamine-dependent individuals. Participants were recruited from the Los Angeles community by advertisements and all participants were compensated for their participation. All met Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, criteria for methamphetamine abuse or dependence. Twenty participants completed the study protocol. The study was a clinical trial using a double-blind, placebo-controlled design. Participants were given intravenous methamphetamine (0, 15, and 30 mg) before and after randomization to twice daily dosing of bupropion or placebo. Baseline and following methamphetamine administration, the participants completed theVAS questionnaire which is designed to assess rapidly acquired ratings of craving, dysphoria, and euphoria. Samples of these ratings included: 'Any drug effect', 'High', and 'Good effects'. Scores from 0 (not at all) to 100 (strongest ever) were obtained from this instrument. The participant’s blood pressure and heart rate were also measured at baseline and at several intervals after administration of methamphetamine. Gender differences for systolic and diastolic blood pressure were found to be statistically significant (F=6.7, p<.0254 and F=6.04, p<.0318, respectively). We found no statistically significant differences for systolic and diastolic blood pressures within groups at baseline and post-bupropion administration, however there were statistical differences between males and females. There were also no statistically significant differences in heart rate between males and females. In addition, females reported increased ratings (range: 5-20 points) for 'High' compared to males at all time points following administration of methamphetamine. In addition, females reported higher ratings (range: 15-20 points) for 'Any drug effect' when compared to males at all-time points with the exception of 60 min post-administration of methamphetamine. Overall, females reported higher scores on the VAS 'High' effect after the 3 min post-administration of methamphetamine versus males whom reported an average 15 point decrease in the VAS score post-methamphetamine administration. Differences in gender-specific treatment modalities need further investigation to enable the development of appropriate treatment options for methamphetamine addiction.

20. Distinct Roles for Cav2.1-2.3 in Activity-Dependent Synaptic Dynamics

Ulises M. Ricoy, Ph.D., Northern New Mexico College; Matthew E. Farkaš, Oregon Health and Science University

Synaptic transmission throughout most of the CNS is steeply dependent on presynaptic calcium influx through the voltage-gated calcium channels Cav2.1-Cav2.3. In addition to triggering exocytosis, this calcium influx also recruits short-term synaptic plasticity. During the complex patterns of presynaptic activity that occur in vivo, several forms of plasticity combine to generate a synaptic output that is dynamic, in which the size of a given EPSP in response to a given spike depends on the short-term history of presynaptic activity. It remains unclear whether the different Cav2 channels play distinct roles in defining these synaptic dynamics, and if so under what conditions different Cav2 family members most effectively determine synaptic output. We examined these questions by measuring the effects of calcium channel-selective toxins on synaptic transmission in response to both low-frequency stimulation and complex stimulus trains derived from in vivo recordings. Each Cav2 family member interacts differently with presynaptic neurochemistry so that Cav2.2 has a disproportionately reduced contribution to synaptic transmission at frequencies >20 Hz, while Cav2.1 has a disproportionate increased contribution to synaptic transmission at frequencies >1 Hz. These activity-dependent effects of different Cav2 family members shape the filtering characteristics of GABAB receptor-mediated presynaptic inhibition. Thus, different Cav2 channels vary in their coupling to synaptic transmission over different frequency ranges, with consequences for the frequency tuning of both synaptic dynamics and presynaptic neuromodulation.
21. Augmented Nitric Oxide Production in the Paraventricular Nucleus Inhibits Vasopressin Release During Hemorrhage in Acute Alcohol Intoxicated Rodents  
April J. Whitaker, Rosalba Lopez-Pedraja, Patricia E Molina. Department of Physiology, Louisiana State University Health Science Center, New Orleans, LA. 
Acute alcohol intoxication (AAI) impairs hemodynamic and neuroendocrine counter-regulation to hemorrhagic shock (HS). Increased nitric oxide (NO) production in the paraventricular nucleus (PVN) has been implicated in attenuating AVP release during AAI. 

22. Molecular Interactions Between Beta-Catenin/TCF-4 Signaling and HIV: A Model for HIV Pathogenesis in the CNS  
Lena Al-Harthi. Rush University Medical Center, Chicago, IL. 
HIV replication and pathogenesis in the CNS is a multifaceted and a complex process. While current paradigm places a significant emphasis on monocytes/macrophages/microglia in HIV dissemination in the CNS, the role of astrocytes in HIV productive replication has been unclear. Recent studies have suggested that astrocytes produce cytokines/chemokines in response to HIV infection and HIV replication in astrocytes can lead to immune activation, cytokine and chemokine production, and altered glial functions. Astrocytes are also important in regulating the microenvironment in the CNS and play a crucial role in the establishment of a permissive environment for HIV infection and replication. 

23. Host Restriction of HIV-1 Replication  
Yong-Hui Zheng. Michigan State University, East Lansing, MI. 
HIV infection of host cells is a complex process that involves multiple steps, including the binding of the viral envelope protein to the host cell, entry of the viral nucleocapsid into the cell, and uncoating and release of the viral DNA into the nucleus. Host factors play a critical role in restricting HIV replication. 

24. HIV-1 Nef Expression in Astrocytes Impairs Spatial Memory  
Richard J. Noel, Ph.D.  
According to recent estimates by the CDC, over three times as likely as non-Hispanic whites to be diagnosed HIV+, thus putting them at greater risk of HIV associated illnesses including neurocognitive decline. Combination antiretroviral therapy (cART) is very effective in controlling viral replication and progression to AIDS; however, memory impairment remains a dilemma even for some HIV infected people on cART. In the CNS, HIV infection of astrocytes leads to production of viral proteins that may persist even when viral replication is controlled. Previous studies have shown that astrocytes express the HIV-1 Nef protein. 

LEARNING OBJECTIVES:  
1. Introduce HIV-1 life cycle  
2. Summarize HIV-host interaction  
3. Overview intrinsic immunity in defending retrovirus infection  
4. Summarize HIV-mediated adaptation to Wnt/beta-catenin signaling  
5. Summarize current paradigm in HIV mediated neuropathogenesis  
6. Discuss the role of astrocytes in HIV replication and pathogenesis  
7. Describe the Wnt/beta-catenin pathway and its relationship to HIV  
8. Recognize HIV-mediated adaptation to Wnt/beta-catenin signaling  
9. Summarize the major target for this factor on HIV-1, and we are also trying to rescue HIV-1 replication in CEM.NKR by small chemical compounds to understand this novel antiretroviral mechanism. These new progresses will be presented in this meeting.  

NATIONAL HISPANIC SCIENCE NETWORK ON DRUG ABUSE ELEVENTH ANNUAL CONFERENCE
26. The Multiphase Optimization Strategy (MOST): Building Highly Efficacious, Effective, and Efficient Interventions to Improve Minority Health


Behavioral interventions for treatment and prevention of health problems are typically developed and evaluated using a treatment package approach. In this approach the intervention is assembled a priori and evaluated by means of a two-group randomized controlled trial (RCT). Refinement of the intervention is often done by conducting post-hoc analyses on data from the RCT. In this talk I will suggest a different framework for building and evaluating behavioral interventions. This new framework, called the Multiphase Optimization Strategy (MOST), is a principled approach to intervention optimization that has been inspired by ideas from engineering. MOST includes a series of distinct steps, one of which is the RCT. However, before the RCT there are additional steps aimed at: identifying intervention components for study; conducting randomized experiments to assess the extent to which each component is contributing to overall intervention efficacy (performance under ideal circumstances), effectiveness (performance under real-world circumstances) and/or cost-effectiveness (performance in relation to resource expenditure); and fine-tuning, for example experimentation to identify the ideal levels or settings of intervention components that can take on numerous values. The MOST framework relies heavily on resource management by strategic choice of highly efficient experimental designs. It is proposed that MOST offers several benefits, including more rapid long-run improvement of interventions, without requiring a dramatic increase in intervention research resources.

LEARNING OBJECTIVES:
1. Compare efficiency of various experimental designs
2. Assess utility of taking an engineering perspective on behavioral intervention science
3. Consider possible applications of MOST framework

27. Racial/Ethnic Differences in Urban Chicago Adolescents' Sexual Risk-Taking

Stephanie Staras, Ph.D., Department of Health Outcomes and Policy, University of Florida College of Medicine

In the United States (US), racial/ethnic disparities in human immunodeficiency virus (HIV) diagnoses persist and remain relatively unexplained. One contributing factor may be the probability of adolescents having unprotected sex with a partner who is likely to have HIV. We assessed differences in sexual risk-taking (sex, unprotected sex, and unprotected sex with risky partners) among Chicago adolescents aged 15-18 years old. We classified in age, expected on that day, and not drinking prior to sex. All other partners were classified as riskier. Non-Hispanic black females (73%) and males (78%) were most likely to have had sex. Among females, non-Hispanic whites (54%) and Hispanics (US born =53% and non-US born =52%) were similarly likely to report having had sex. Among males, US born Hispanics (61.8%) and non-US born Hispanics (62%) were more likely to report sex than non-Hispanic whites (53%). Unprotected sex was less common among non-Hispanic whites (36.8%) and non-Hispanic black women (40%). Among women reporting unprotected sex, we found a trend (p-value=0.2) toward more frequent reporting of riskier partners among non-US born Hispanic women (48%) compared to other women (non-Hispanic black=37%, non-Hispanic white = 37%, and US born Hispanic =35%). Between one-third and one-half of women having unprotected sex acted riskier partners. Prevention of HIV among women may be improved by focusing on reducing the number of unprotected sex acts with risky partners, especially among non-US born Hispanics.

LEARNING OBJECTIVES:
1. Describe racial/ethnic disparities in Chicago adolescent sexual risk-taking
2. Explain the role of partner selection in HIV risk
3. Discuss racial/ethnic disparities in partner selection

28. Alcohol, Rule Breaking and Aggressive Behaviors among Hispanic Adolescents

David Cordova, Ph.D., Department of Epidemiology and Public Health, University of Miami

The purpose of this study was to examine ecodevelopmental risk factors associated with alcohol use, rule breaking and aggressive behaviors among Hispanic delinquent adolescents. Specifically, this study tests the hypothesis that: family, peer, and school bonding on alcohol use, rule breaking and aggressive behaviors in Hispanic delinquent youth. Of a sample of 235 heterogeneous Hispanic delinquent adolescents recruited through referrals from the Miami-Dade County's Department of Juvenile Services and from the Miami-Dade County School system. Logistic regression methods were utilized to examine the independent effect of each risk factor (attitudes, family, peers, school) and to determine the extent to which these factors are associated with alcohol use, rule breaking and aggressive behaviors. Family functioning was inversely and significantly related to past 90-day alcohol use in univariate regression (β = -.24, p = .035) but was not significant in multiple regression (β = -0.09, p = .556). Peer alcohol use (β = 2.02, p<0.001) and poor alcohol attitudes (β =0.59, p=.006) were positively and significantly related to past 90-day alcohol use in the final model. Poor alcohol attitudes, family functioning, peer alcohol use, and school bonding were all significantly related to both rule breaking and aggressive behaviors in the final model. Findings highlight the importance of identifying risk factors at multiple levels to prevent/reduce alcohol use, rule breaking and aggressive behaviors among Hispanic delinquent youth.
LEARNING OBJECTIVES:
1. Identify ecodevelopmental risk factors associated with alcohol use and problem behaviors in a sample of Hispanic delinquent adolescents.
2. Recognize the effect of attitudes, family, peer, and school bonding on alcohol use, rule breaking and aggressive behaviors in Hispanic delinquent youth.
3. Observe the importance of identifying risk factors at multiple levels to prevent/reduce alcohol use, rule breaking and aggressive behaviors among Hispanic delinquent youth.

29. Assessing Differences Among Racial/Ethnic Groups in Episodes of Mental Health Care

Benjamin Cook, Ph.D., Department of Psychiatry, Cambridge Health Alliance, Harvard Medical School

Cross-sectional analyses of disparities in mental health care may miss important information (e.g., the probability of initiation of care and its duration) that is relevant to understanding disparities and identifying policies to decrease disparities. In this paper, we incorporate information related to episodes of care, including the identification of initiation of care, the length and intensity of episodes of care. We also compared disparities measured using this episodic data with typically used cross-sectional analyses and comment upon the policy implications of differences in measurement and disparities results. We combined four two-year longitudinal datasets from Panels 9-12 (2004-2008) of the Medical Expenditure Panel Surveys. We assessed mental health care episodes among individuals with probable mental health care need (K6>13 and PHQ-2>2) with a total of 2217 Whites, 866 Blacks, and 1143 Latinos. We assessed three different aspects of mental health utilization episodes among non-Latino whites, African-Americans and Latinos: 1) the probability of initiation of care; 2) the intensity (visits and expenditures) and duration of care (days) during an episode; and 3) quality of care (eight or more mental health care visits or four or more visits with a prescription fill). We used logit regression models to generate predicted probabilities of initiating mental health care and quality of mental health care. Intensity of care is measured using negative binomial regression models for number of visits per episode and generalized linear models to measure days and expenditures per episode. Initiation and quality are compared in episodic and cross-sectional contexts. The probability of initiation of a mental health care episode and having a quality mental health care episode is lower for Blacks and Latinos than Whites. Latinos and Blacks have episodes with shorter duration and number of visits than Whites. The magnitude of disparities is not consistent across cross-sectional and episodic analyses and episodic and cross-sectional analyses are similar in direction as disparities identified in previous cross-sectional studies in any use of mental health care and average yearly spending. However, the magnitude of these disparities is not consistent across these types of data analyses. We recommend the use of episodic analyses when longitudinal data is available given that information related to initiation and dropping of care is potentially more useful to the development of policy solutions.

LEARNING OBJECTIVES:
1. Understand the magnitude and direction of racial/ethnic disparities in behavioral health care episodes.
2. Understand the distinction between disparities estimates using longitudinal and cross-sectional data and its ramifications for disparities estimates.
3. Identify policy handles that may be useful for ameliorating disparities in mental health care.

30. Racial/Ethnic Disparities in Mental Health Care among the Elder Population

Daniel Jimenez, Ph.D., Dartmouth Medical School

The Institute of Medicine disparities framework is implemented to identify patterns of mental health service use in a multi-ethnic older adult sample. Comparisons regarding episodes of care are made in a national sample of older African-Americans and Latinos with non-Latino Whites. It is hypothesized that there will be disparities in the initiation and duration of episodes of mental health care of older non-Latino whites compared to older African-Americans and Latinos. Two-year longitudinal datasets from Panels 9-12 (2004-2008) of the Medical Expenditure Panel Surveys were combined. Mental health care episodes were assessed among individuals aged 60+ with probable mental health care need (K6>13 and PHQ-2>2). A total of 1097 participants were included (650 Whites, 190 African-Americans, and 257 Latinos). Three different aspects of mental health care episodes were analyzed: 1) treatment initiation; 2) the intensity (visits and expenditures) and duration of care (days) during an episode; and 3) quality of care (eight or more mental health care visits or four or more visits with a prescription fill). Treatment initiation and quality were lower for older African-Americans than older non-Latino Whites. Older Latinos also had lower rates of initiation, but experienced episodes with lower duration and more expenditures than older non-Latino Whites. Differences in treatment initiation persist after adjusting for need (mental and physical health conditions) and system factors (SES, education, insurance, etc.). Differences in treatment initiation quality and potentially lower satisfaction with treatment. Lower rates of treatment initiation but increased duration and expenditures in older Latinos may be due to initiation of care at more severe stages of mental illness. These results may be used to develop policy interventions targeting mechanisms underlying mental health care disparities.

LEARNING OBJECTIVES:
1. Describe patterns of mental health service use in ethnic minority elderly.
2. Identify disparities in mental health care among ethnic minority elderly.
3. Develop policy interventions targeting mechanisms underlying mental health care disparities in ethnic minority elderly.

31. Assessing the Quality of Mental Health Treatment for Racial/Ethnic Minorities after Inpatient and Emergency Mental Health Treatment

Nicholas Carson, M.D., Division of Child and Adolescent Psychiatry, Cambridge Health Alliance

A common metric for assessing continuity of care after discharge from inpatient and emergency (ER) psychiatric care is whether patients receive follow-up visits within seven or thirty days. Several factors have been shown to identify those who are less likely to receive such care, including cultural minority status. We propose to measure racial/ethnic disparities in receipt of follow-up care across major cultural groups using measures of treatment episodes as opposed receipt of a single follow-up visit. We improve upon prior studies by implementing a conceptually based definition of racial/ethnic healthcare disparities and by tracking the intensity and quality of treatment episodes after discharge from inpatient and emergency mental health care settings. We analyze Panels 5-12 from the Medical Expenditure Panel Surveys, where each panel represents a two-year period of longitudinal data. Our preliminary sample includes 1,882 Whites, 395 Blacks, and 494 Latino respondents with an ER visit for mental health and 1,241 Whites, 270 Blacks, and 271 Latinos with an inpatient mental health visit. We use standard definitions of treatment episodes and adequate treatment to determine the quality of care in the wake of these treatment events. We define a treatment episode as at least one visit bounded by either inpatient/ER care or twelve weeks of no visits, and adequate care as eight visits of psychotherapy or four visits of which one is a medication visit. Racial/ethnic healthcare disparities are measured using the Institute of Medicine definition, including differences due to socioeconomic status but not those related to clinical appropriateness and need. Racial/ethnic disparities were found in receiving follow-up care within 30 days of mental health ER visit (Whites 73%, Blacks 63%, Latinos 63%). Racial disparities remained after adjusting for need (mental and physical health conditions) and system factors (SES, education, insurance, etc.). Differences in treatment initiation quality and potentially lower satisfaction with treatment are also evident.

LEARNING OBJECTIVES:
1. Describe patterns of mental health service use in ethnic minority elderly.
2. Identify disparities in mental health care among ethnic minority elderly.
3. Develop policy interventions targeting mechanisms underlying mental health care disparities in ethnic minority elderly.

Abstracts
LEARNING OBJECTIVES:
1. Summarize racial and ethnic disparities in adequate mental health treatment following inpatient and emergency mental health visits;
2. Observe an innovative approach to measuring disparities in mental health service use;
3. Recognize important predictors of adequate mental health treatment following inpatient and emergency room visits among racial/ethnic minorities;
4. Apply similar analyses to other service use data sets.

32. Patterns and Predictors of HIV/STI and Drug Risk Among Latino Migrant Men in Post-Katrina New Orleans
Patricia Kissinger, Ph.D., School of Public Health, Tulane University

The purpose of this presentation is: 1) to discuss vulnerabilities of Latino migrants in new receiving communities, 2) to present some of the issues of conducting research with Latino migrant men and 3) to present the findings of our preliminary cohort study of HIV/STI and substance use among Latino migrant men in post-Katrina New Orleans. The study was to examine patterns and predictors of HIV/STI risk over time among Latino migrant men in a new receiving community. Latino men (N=125) were interviewed quarterly for 18 months and HIV/STI tested annually. Selected individual, environmental and cultural factors by partner type and condom use were explored longitudinally and in a cross-section. Sex with female sex workers (FSWs) and multiple partners decreased, sex with main partners and abstinence increased, while the number of casual partners remained stable. Consistent condom use was highest with FSWs, lowest with main partners and midrange with casual partners with no trends over time. STI morbidity was low; no HIV was detected. Drug use and high mobility were associated with inconsistent condom use with FSW, whereas having family in the household was protective. HIV/STI prevention efforts should focus on drug using Latino migrants who are highly mobile and should foster healthy social connections.

LEARNING OBJECTIVES:
1. Discuss factors that contribute to health vulnerability among Latino migrant men.
2. Describe how these factors can be magnified in new receiving communities.
3. Discuss possible solutions to challenges of research with Latino migrant men.
4. Identify individual, social and environmental factors that contribute to high risk sexual and drug behaviors among Latino migrant men.

33. Fumando La Piedra: Crack Use & High Risk Sexual Behaviors among Latino Immigrant Day Laborers in Post-Katrina New Orleans
Alice Cepeda, Ph.D., University of Houston Department of Sociology & Center for Drug and Social Policy Research

The effects of Hurricane Katrina have led to a dynamic demographic shift in the ethnic and racial composition of New Orleans. While the Latino population has dramatically increased, little is known on how these immigrants are adapting to this new urban settlement area or the incidence of emerging patterns of drug abuse and related sexual risk behaviors in this population. This presentation focuses on a particularly deleterious pattern of risk behaviors- smoking crack cocaine and high risk sexual behaviors. Utilizing a rapid assessment methodology, in-depth qualitative interviews were conducted with 77 Latino male immigrant day laborers in Post-Katrina New Orleans. Discussed is how situational and contextual factors have contributed to the spread of crack among Latino immigrant day laborers in New Orleans. Specifically, the presence of a flourishing drug market has facilitated and maintained patterns of crack use including initiation, periods of daily use and relapse. Moreover, the absence of conventional sexual networks coupled by a sense of loneliness has contributed to the day laborers involvement in risky sexual behaviors. Discussed is the association between crack use and high risk sexual behaviors and the potential transmission of HIV infection among Latino immigrant day laborers in a post disaster context.

LEARNING OBJECTIVES:
1. Recognize 2 distinct migration settlement patterns experienced by Latino day laborers in post-Katrina New Orleans.
2. List 3 intersecting concepts utilized to organize rapid assessment data collection among hard to reach drug using populations.
3. Recognize 3 patterns of crack use (initiation, frequency and preparation) and involvement in 2 types of high risk sexual behaviors among post-Katrina Latino day laborers.
4. Explain how situational and contextual factors contribute to HIV related drug use and sex risk behaviors among Latino day laborers in post-Katrina New Orleans.

34. Reflections on Drug Use in a Post-Deportation Setting: The Case of Mexican IDUs
Victoria D. Ojeda, Ph.D., M.P.H., Division of Global Public Health, Univ. of California, San Diego

This presentation will first contextualize the U.S.-Mexico border region, emphasizing the conditions and characteristics of the Tijuana/San Diego communities. Next, I will review patterns of drug use and HIV in Mexico and among Mexican migrants to the United States. Finally, I will review key findings from a series of quantitative and qualitative studies that we have conducted with a cohort of injection drug users who reside in Tijuana, Mexico. The presentation will reflect on these findings, implications for binational policies, and next steps in migrant health substance use and HIV-related research.

LEARNING OBJECTIVES:
1. To provide an overview of the California-Mexico border region
2. To familiarize participants with patterns of drug use and HIV in Mexico
3. To increase participants’ knowledge about drug use trajectories among post-Katrina Latino day laborers in post-Katrina New Orleans.
40. Impact of Proximity of Public Transit Stops on Levels of Physical Activity in Recent Cuban American Immigrants

Scott C. Brown, Ph.D.; Hilda Pantin, Ph.D.; Shi Huang, Ph.D.; Joanna Lombard, M.A.; C. Hendricks Brown, Ph.D.; Matthew Toro; Tatiana Perrino, Psy.D.; Gianna Perez-Gomez, Ph.D.; and Elizabeth Plater-Zyberk, M.A., University of Miami Miller School of Medicine; Olivia Thomas Affuso, Ph.D., University of Alabama; Lloyd Barrera-Allen; and José Szapocznik, Ph.D., University of Miami Miller School of Medicine.

Few studies have examined the built environment’s relationship to walking in Cuban middle-aged immigrants, a population and age group at risk for declines in physical activity, and who initially were unlikely to choose where they lived in the US. This study aims to examine the relationship of residential built environment characteristics in Miami-Dade County to recent walking in Cuban immigrants, and whether this relationship is moderated by individuals’ physical activity level in Cuba. The relationship between built environment characteristics (using GIS) and recent walking in the US (self-reported for the past week) in recent Cuban immigrants (ages 30-45) was examined in this study. Participants were 391 recent healthy Cuban immigrants (187 women and 204 men; M age=37.1) recruited within 90 days of arrival in the US (M=24.8 days in the US) and assessed within 4 months of arrival in the US (M=41.0 days in the US), who resided throughout Miami-Dade County, FL. Data were collected prospectively from 2008 to 2010, and analyses were performed in 2011. For those participants who were physically active in Cuba, higher levels of built environment walkability in the US were significantly associated with greater likelihood of walking for transport in the US, β=0.486, p=.005. However, for participants who were not physically active in Cuba, built environment walkability in the US was not related to walking for transport. The interaction between physical activity in Cuba and walkability in the US was not significant, β=-0.127, p=.469. Built environment characteristics may be an important determinant of walking behavior for recent immigrants who were physically active in their country of origin.

41. The Relationship of the Built Environment to Walking in Recent Cuban Immigrants: The Cuban Health Study

Scott C. Brown, Ph.D.; Beverly Black, Ph.D.; Richard Schoeck, Ph.D.; and Nada Elias-Lambert, L.M.S.W., the University of Texas at Arlington.

There is growing recognition that the leading health hazards among teens in the United States are health-risk behaviors, such as substance abuse and relationship violence. Based on the steady rates of substance abuse and increasing rates of relationship violence among teens, there continues to be a significant need for the creation of innovative prevention programs that address these two complementary health-risk concerns. Our project addresses these two health-risk concerns in middle school teens by investigating and evaluating the potential and efficacy of integrating current communication technologies and devices with game-based behavior modification techniques. We combine the Android tablet platform with online multiplayer social game technology and social networking to build on three major technology trends among teens. Our prevention framework uses the Transtheoretical Model (TTM) and an integrative model of behavior change. TTM is generally used as an intervention framework but has begun to be used in the area of prevention. Our project develops a substance abuse and relationship violence prevention game called “Choices and Consequences” where the goal is for small groups of players to select activities that result in a fun but safe weekend. To help design and develop Choices and Consequences, we will be working with several groups of teens in an Alternative school who were developing healthy living skills. Players in Choices and Consequences will be presented with scenarios where points and rationales for each action selected inform them as to how fun, risky, and protective their chosen activities can be. Current curricula and relevant research provided themes, such as decision making and healthy relationships, guide the scenarios presented in the 4 rounds of the game. For an hour of class game play each week, teens will also be able to discuss game content with a group facilitator. To evaluate the efficacy of Choices and Consequences, a nonequivalent comparison group quasi-experimental design will be used. Eighty eight healthy living school students were divided into teams of 4-6 game players. For comparison, the control group from other classes will receive the survey, but not the intervention. Paired sample t-tests and analysis of variance (ANOVA) will be used for data analysis. Although results are not currently available, we expect to find that TTM not only can inform intervention work, but prevention as well. We also expect our results will demonstrate that this delivery method of receiving health information from multi-media combinations can be used as a feasible prevention method. Moreover, given that teens increasingly rely on new technologies for a number of learning and living purposes, we expect that this electronic media based prevention program will be efficacious in reducing substance use and relationship violence behaviors.

42. Impact of Proximity of Public Transit Stops on Levels of Physical Activity in Recent Cuban American Immigrants

Scott C. Brown, Ph.D.; Lloyd Barrera Allen; Gianna Perez-Gomez, Ph.D.; Matthew Toro, B.A.; Shi Huang, Ph.D.; Tatiana Perrino, Psy.D.; Hilda Pantin, Ph.D.; Joanna Lombard, M.Arch.; and José Szapocznik, Ph.D., University of Miami Miller School of Medicine.

The presence of public transit stops is an important aspect of the built environment that may encourage physical activity, such as walking for transportation. This study examined the association between public transit stops and residents’ walking for transportation. In order to assess whether bus stop network distance or Metrorail network distance was related to walking for transportation, physical activity data from a sample of recent Cuban American immigrants (n = 358) was used to perform logistic regression in conjunction with geographic information systems (GIS) data. Results showed that bus stop network distance and Metrorail network distance did not predict whether a participant would walk or the amount of walking for transportation. In conclusion, the study failed to show a public transit stops with walking for transportation in recent Cuban American immigrants. Longitudinal analyses should re-examine this relationship, since it is possible that this sample accommodates better to their built environment after certain period of time in the United States.

43. Utilizing Organizational Typologies to Explain Gang Involved Drug Distribution Networks

Robert J. Duran, Ph.D., New Mexico State University.

This presentation explores the relationship between gangs and drug distribution networks based upon several gang typologies. Research data has been collected in several sites (Denver, Colorado from 2001-2006; Ogden, Utah from 1995 – present; and Southern New Mexico/West Texas border region from 2007 – present). The study has primarily benefitted from ethnographic interviews and field observations in addition to archival and secondary data sources to determine gang member involvement in the distribution of drugs. This study finds the level of organization of the gang and its socially developed purpose having a tremendous impact upon whether a gang member will be expected to sell drugs or pursue such a career individually. The structurally limited options of a successful drug career are influenced by executive branch initiatives of suppression, life course patterns within a gang, and links to wholesale suppliers.
44. Hispanic Males Under 26 in California’s Prop. 36 Drug Treatment Programs
Michael Campos, Ph.D.; Joy Yang, M.P.P.; Darren Urada, Ph.D.; Jeremy Hunter, M.A.; and Nelson Tiburcio, Ph.D., University of California, Los Angeles
California’s Proposition 36 (Prop. 36) provided for drug treatment as an alternative to incarceration for non-violent drug offenders. The number of Hispanics in Prop 36 has been growing and they currently represent the second largest race/ethnic group in Prop 36, with Non-Hispanic Whites being the first. In this study, we examine culturally responsive (CR) practices among Prop 36 treatment programs and barriers to treatment among Hispanic males under 26. A subset of Prop 36 funded treatment providers were surveyed on CR program practices and what they perceived to be barriers to treatment for young Hispanic males in Prop 36 treatment. Focus groups were conducted with Hispanic Prop 36 Program participants to identify barriers to treatment for young Hispanic males. Key informant interviews were done with stakeholders in the Prop 36 program as well to assess barriers to treatment entry among Hispanic males under 26 in Prop 36. CR was low overall among Prop 36 treatment providers. The mean score on a measure of perceived CR was 4 out of a possible 11. Residential programs were particularly low on CR, with the mean score being a 1 out of a possible 11. The top 5 barriers to treatment entry among Hispanics under 26 were drug using peer groups, language barriers, work obligations, no perceived need for treatment, and immigration status. Some of the reported barriers to treatment were echoed in qualitative data gathered from focus groups conducted with young Hispanic males in Prop 36. Key informant interviews with Prop 36 providers indicated that a major barrier to treatment entry for young Hispanic males was the fact that they often worked as laborers ‘under the table’ and any time away from work represented an economic loss for them and their families. Despite the fact that Hispanics are the second largest ethnic group among Prop 36 clients, only a minority of programs have taken significant steps to provide CR services to Hispanic clients in Prop 36. Overall, the CR of Prop 36 providers was low. In particular, residential treatment providers had low scores on measures of CR. There is a need to develop more CR residential treatment programs to serve Hispanic clients in Prop 36. Continued training in CR for Prop 36 providers may increase the number of CR practices employed by Prop 36 programs. We recommend the systematic incorporation of CR practices, particularly among programs serving high numbers of Hispanic individuals. In the mental health literature, “a meta-analysis of the literature found that mental health treatments were four times more effective when culturally modified for a specific group and when attentive to cultural context and values” (Añez, Silva, Paris, & Bedregal, 2008, pp. 154).

45. Dynamics of Acculturation, Enculturation, Acculturative Stress, and Psychological Distress: A Stress Response Model Predicting Alcohol Consumption among Hispanics in Late Adolescence
Miguel Angel Cano, Ph.D., MPH, the University of Texas MD Anderson Cancer Center
Alcohol use disparities among Hispanic adolescents are evident because this population has the highest annual prevalence of heavy drinking. This is cause for concern given the rapid growth of the Hispanic population; it is likely that the prevalence of heavy drinking and alcohol use disorders will increase. Researchers have suggested that acculturation plays a key role in understanding ethnic disparities in health and is a critical factor that must be included in the examination of alcohol use among Hispanics. However, there is disagreement on how acculturation influences alcohol use behavior among Hispanics. In part, this problem may stem from inadequate measures of acculturation and neglect of mediating variables. In an effort to address these limitations, a stress response model of acculturation to predict alcohol consumption was tested. The present study examined a) the influence of behavioral and cognitive acculturation/enculturation on acculturative stress; b) the direct influence of acculturative stress on psychological distress and alcohol consumption; and c) the mediating role of psychological distress between acculturative stress and alcohol consumption. 179 Hispanics respondents in late adolescence, ages 18 to 21 completed the Alcohol Use Disorder Identification Test; Kessler 10 measure of psychosocial stress (K-10); Acculturation Rating Scale for Mexican Americans-II (ARSM-II); measure of Social, Attitudinal, Familial, and Environmental Acculturative Stress (S.A.F.E); and other demographic questions. Data were collected through an anonymous online survey that was distributed in multiple states to students currently enrolled in a two-and four-year institutions of higher education. A path model was used to examine the influence of behavioral and cognitive acculturation/enculturation, acculturative stress, and psychological distress in relation to alcohol consumption among Hispanics in late adolescence. Further, the mediating role of psychological distress was tested to evaluate the indirect relationship between acculturative stress and alcohol consumption. Results indicate the path model had good model fit (I2 (12, N = 179) = 14.46, p = .27; CFI = .98; RMSEA = 0.03; SRMR = .04). The following path coefficients were statistically significant: behavioral acculturation to acculturative stress (β = -.25, p < .001); cognitive enculturation to acculturative stress (β = .27, p < .001); acculturative stress to psychological distress (β = .46, p < .001); and psychological distress to alcohol consumption (β = .22, p < .01). While the direct path from acculturative stress to alcohol consumption was not statistically significant results indicate this relationship was mediated by psychological distress; thus acculturative stress had a statistically significant indirect effect on alcohol consumption (β = .11, p < .01). Overall, the model accounted for 22.7% of the variance of psychological distress and 17.6% of the variance of alcohol consumption. The findings of this study significantly demonstrates the predictive value of acculturation on acculturative stress; and confirms the notion that the acculturation process elicits a stress response leading to higher quantities of alcohol consumption. Additionally, the study highlights the indirect mechanisms by which acculturation, enculturation, and acculturative increase alcohol consumption; adding to our understanding of how and why these constructs influence alcohol use. More importantly, these findings may help address alcohol use disparities among Hispanic adolescents by informing future treatment and prevention interventions.

46. Health Consequences of Traumatic Events and Coping Strategies among Hispanic Drug Using Women in Puerto Rico
This presentation will address the health consequences of traumatic events and the mechanism used by Hispanic drug using women to cope with experiences. The study compares demographics, patterns and route of drug use, HIV risk behaviors, the physical and mental health among women who report traumatic events, and assesses if trauma experiences have any direct impact on substance abuse. Also, the study detects specific mental health conditions associated with traumatic events such as depression, anxiety, and suicide ideation. The study sample consisted of 55 women who used drugs (ages 18-35 years) recruited in the metropolitan area of San Juan, Puerto Rico as part of a large study assessing the effects of stress and HIV on the immune status. Overall, 30.9% of the participants were identified with a PTSD problem using the PC-PTSD Screen. Those who reported a PTSD problem also scored high in the PERI scale and in the drug-related stress scale. PTSD problems were associated among those women diagnosed with alcohol abuse. Visit to a health provider was the only protective factor associated with PTSD. From the inventory of trauma events, the events associated with trauma included physical attacks on the face (40.5%, p=0.001); intent to suffocate by other (66.7%, p=0.032); wounded (62.5%, p=0.001); and drowning intent by other (60.0%, p=0.001). The event of experiencing the death of a family member (42.3%, p=0.032) was also associated with trauma. Recommendations and future steps in substance use disorder treatment service for Hispanic women with trauma events will be presented based upon this investigation.

Abstracts
Depression is strongly linked to the initiation, maintenance and cessation of cigarette smoking, but previous cessation research has largely examined White smokers, and little is known about how depression influences smoking cessation among minority smokers. The paucity of data addressing the determinants of smoking cessation among minorities severely hinders the development of effective interventions to improve quitting among promising treatment populations. Recent cross-sectional evidence suggests that depression may be differentially related to smoking across racial/ethnic groups. Specifically, this research indicates that influence of depression on smoking may not generalize to Latinos. The current study extends this cross-sectional research by prospectively examining the impact of depressive symptoms on smoking cessation across three racial/ethnic groups. Data were derived from 389 participants, a longitudinal study examining racial/ethnic differences in smoking cessation in the U.S. (African American, Latino, or non-Latino White) was self-reported. Depressive symptoms were assessed with the Center for Epidemiologic Studies Depression (CES-D) scale. Continuous abstinence (confirmed by an expired carbon monoxide reading of < 10 parts per million) across weeks 1, 2, and 4 post-quit was the outcome variable. An intent-to-treat procedure was followed, whereby those who fell to follow-up were considered not abstinent. The main effects of race/ethnicity and CES-D, and their interaction were examined on abstinence with continuation ratio logit modeling. Covariates included age, gender, partner status, education, employment status, minutes lapse after waking before smoking the first cigarette of the day, and average number of cigarettes per day. There were no significant main effects on abstinence of race/ethnicity or CES-D. The interaction of race/ethnicity and CES-D was significant ($\chi^2 (2) = 6.03, p = .049$). CES-D differentially predicted abstinence for Latinos versus Whites (AOR = 1.05, 95% CI = 1.007-1.09), and Latinos versus African Americans (AOR = 1.05, 95% CI = 1.006-1.10), but not for Whites versus African Americans (AOR = 99, 95% CI = 95.1-1.04). Completer’s only analyses differed only in that the main effect of CES-D was significant. The interaction of race/ethnicity and CES-D remained significant above and beyond the main effect of CES-D. Data indicated that higher abstinence rates were associated with lower CES-D scores among Whites and African Americans, but CES-D did not impact abstinence rates among Latinos. The current study extends the previous findings to prospectively predict smoking cessation during a specific quit attempt. Results have practice implications for treatment implementation and suggest that depression may not be a key determinant of cessation among Latino smokers. The current study identifies a need to understand why depression is differentially associated with cessation by race/ethnicity. Continued examination of whether or not other known key determinants of smoking cessation generalize to minority and underserved populations of smokers is warranted, as this will influence treatment targeting and cultural tailoring of smoking cessation interventions. Limitations include examination of only three racial/ethnic groups and short-term abstinence, use of self-selected treatment seeking smokers (i.e., limited generalizability), and that these novel findings will need replication.
the same areas in both sexes, not forgetting to take into account specific aspects related to the social construction of gender roles, because the meanings attributed to experiencing depression may vary depending on the subjectivity.

50. Macho Attitudes and Behaviors as Determinants of Health-Related Outcomes in High-Risk Males: Implications for Designing Male-Sensitive Interventions
Felipe Gonzalez Castro, Ph.D., M.S.W., University of Texas at El Paso; Joshua Kellison, M.A., Arizona State University; and Judith Stein, Ph.D., University of California at Los Angeles

Although Macho attitudes and behaviors have been observed among many male populations including among many All American males, the construct of Machismo is often described as a core cultural facet of Latino male identity. Extreme machismo may be a characteristic associated with very high risk behaviors with implications for prevention in health psychology. High levels of Machismo have often been associated with unhealthy hypermasculine attitudes and behaviors including: aggressiveness, violence, bravado, hypersexuality, and antisocial conduct. Some investigators have discussed the overlap of macho traits with diagnosable Antisocial Personality Disorder, suggesting also a high prevalence of Machismo among male drug addicted and incarcerated populations. Although Machismo has been typically regarded as a complex of negative and maladaptive traits, recent studies have identified a positive factor in factorially complex construct, a factor of Caballerismo, which refers to male strength that focuses on being a family caretaker who protects women and the family. The present study examined a structural equation model of the positive and negative facets of Machismo as precursors of health-related behavior, in a White American and Latino males clients in drug abuse treatment. This sample of participants consisted of 184 males (53.8 percent Hispanic, 46.2 percent White American) between the ages of 18 and 59 (M = 35.30, SD = 9.02). We tested a conceptual Attitudes-Behaviors-Outcomes model of machismo using a structural equations model analysis in a sample of high-risk males who were in treatment for drug dependence. First, a measurement model identified specific latent factors of machismo: (a) male positive attitudes- Expressive Communications, Caring for the Family; (b) negative male attitudes- Bravado Attitudes. (c) positive male behaviors- Responsibility to Partner and Responsibility to Society; and (d) negative male behaviors- Bravado Behaviors. Second, the final structural model of determinants of positive recovery from drug dependence (life satisfaction and relapse self-efficacy) exhibited a good fit: (a) NFI = 0.851; (b) CFI = 0.95; (c) RMSEA = 0.046, 90% CI = (0.036, 0.050); (d) χ² = 473.80, df = 341. This structural model indicated that Caring for Family, but not Expressive Communications, was an antecedent of life satisfaction and relapse self-efficacy, as mediated by two positive male behaviors: Responsibility to Partner and Social Responsibility. Also a significant attitude-behavior association was observed for Bravado Attitudes and Bravado Behaviors. These results suggest that among drug-dependent males, the attitude of Caring for the Family, an expression of caballerismo, is a core antecedent of behavioral responsibility to spouse and to society, as these behaviors can mediate to life satisfaction and relapse self-efficacy. These results indicate that the treatment of drug dependence for adult males can be made more culturally-relevant yet also more efficacious for avoiding relapse via the inclusion of drug treatment intervention activities that examine positive and negative machismo, and that promote the positive aspects of machismo, while discouraging its negative aspects. Furthermore, two outcome variables: Life Satisfaction and Relapse Self-Efficacy were found to be positively associated with a greater mental well-being. Treatment-related activities that aid in changing male drug user attitudes and behaviors in the direction of supporting and protecting their families, and in attending more actively to their familial obligations and responsibilities, may promote greater success in abstaining from drug use and in avoiding relapse. These results offer implications for the design of male-sensitive adaptive interventions for high-risk males, whereby promoting the attitudes and behavioral skills of caballerismo may produce adaptive health behaviors.

51. Health Promotion in Adolescents Through Physical Exercise and Environmental Exploitation
Javier González-Riera, M.A.S., M.F.T., M.P.H., Andalusian Public Health System. Spain; Juan Gómez-Salgado, M.A.S., M.A.F.T., M.P.H., Huelva University. Spain; Francisco José Montero-Bancalero, M.A.S., M.A.F.T., M.P.H., FAISEM, Osuna-Sevilla, Spain; and Antonio Jesús Molina-Fernández, Andalusia. Spain

Childhood obesity is one of the main problems of public health in developed societies (WHO, 2010). Andalusia is only surpassed by Canaries in prevalence of overweight and obesity among children and youth, still above the Spanish average. (EnKid study, 1988-2000: Overweight or obesity is 29.4%, vs. 26% Spanish average, 3% and obesity 15.6% vs. Spanish average 13%, 9%). Related factors are excessive nutrient intake and sedentary lifestyle (Bleich et al., 2007). Consumption of sugary soft drinks every day 22.6% Consumption of sweets every day 33.7%. Andalusian data ENS, 2006. Population 2-15 years. Two or more hours of television per day: 36.3%EAS 2007, Population 2-15 years. Children do not practice any exercise: 26.8%. EAS 2003. Population 2-15 years. We must promote healthy lifestyles among adolescents and their families (American Dietetic Association, 2006; American Psychological association, 2008a) by physical activity (De Meester et al., 2009; U.S. Department of Health and Human Services, 2008), at school and community (NICIE, 2009) including combined interventions on diet effective (WHO, 2009) and environmental exploitation and its well use, or combined with diet intervention (NICIE, 2008). Everything from an integrated perspective from health promotion (Adair et al., 2008; McVey et al., 2007). Awareness of the physical activity and introduction into daily life. Aimed at teenagers aged 12 to 15 years: 1st and 2nd Course of Secondary School. Adolescent self-assessment by each of their own physical activity habits. Guidelines for physical activity through motivational and psychoeducational techniques. Objectives of the program. Enhance awareness, knowledge and skills about physical activity on health. Promoting change of habits and lifestyles to improve health. Encourage the adoption of exercise as a daily practice in this age group. Contents Interactive discussion sessions on video and web support, and physical activity practice. 3 weekly sessions of 1 hour and a half hours for three weeks: 1 Activity Healthy march from the school. II Assessment of exposure habits and physical activity patterns. III Practice exercise routine and creating choreography. Three assessment & intervention tools: School environment and its influence on the practice of physical activity: Check-List for schools. Assess adolescents through the questionnaire, along with self-registration Physical activity and hours of screen. Impact Pre: and Post test during program implementation. Monitoring: month three months and year. Final Competition “Freak Dance” choreographed by class, Formative: content, presentation and teaching. Through a questionnaire after activity. Class Journal: Qualitative Technique: Field Journal. Increase motivation and awareness about their own physical activity habits. Less hours of screen games and more hours of traditional games. Foster a school environment as an asset in health. Teenagers as guardians of their own center. Be reflected in improved scores on the questionnaires following the implementation of the program. Assess routine proposing other recreational and personal activities. Motivation: showing interest and encouraging expression of feelings and experiences. Foster social relationships with groups and individuals that involve physical exercise. This program is complemented by others in the school and family. The Effects of this Health Promotion program could be measured in medium/long term.
52. Hispanics Struggling for Service Equity in an Anti-Immigrant and Antagonist Environment

María A. Gurrola, Ph.D., M.A., M.S.W., California State University, Long Beach

Hispanic immigrants in the U.S. utilize collectivistic values creating strong communities caring for each other in an individualistic society. Immigration policy in the United States has become more stringent in general but in particular to the Hispanic community. Due to the recent anti-immigration laws and racial profiling, such as the increase of workplace raids, police stops, and e-vetting the stress in the family has increase. This antagonist environment has reduced the Hispanic attempts to receive social services which directly affects Hispanic children’s future in education, mental health and social connections. This poster presents a mix method analysis walking through participant’s profile and their voice to provide a complete picture of this population and their experiences in this environment. Study participants (108) were recruited January 2011 from a school district in a community in Southern California with high number of Hispanic immigrants. All participants were Latino; 91% were immigrants with a mean of 14 years in the U.S.; 93% female, and 71% had less than 9 years of education. Multivariate OLS regressions were run controlling for gender, education, and years in the U.S., looking at the U.S., looking at the U.S. participation relationship between participants perceptions of their children’s mental health. The issues included anger, separation anxiety from parents for short and extended periods of time, fear, and social avoidance. A flexible interview included questions regarding mental health, job security and how the recent immigration policy affects change their families and access to services. Interviews were transcribed and analyzed following grounded methods strategies including memoing, following themes and pairing it with the quantitative results to create stronger results. The results indicated that participants with lower levels of SES had significantly greater (p < .05) perceptions that their children were angry, had separation anxiety from parents for short and extended periods of time, were fearful, and avoided social situations. Higher levels of perceived discrimination were significantly related (p < .05) to participants’ perceptions of fear among their children. This was also a main theme during the focus groups; children’s fear when their parents are not at home or when they go to school. Children’s involvement with other changed and avoidance situations that could lead to their parents’ deportation. Policy changes in immigration affect immigrant’s life’s styles, adjustment to this country and the access to social services. Earlier research found that being an immigrant in this country was a protective factor for mental health issues. This research found that children of recent immigrants are encountering mental health problems which are related to the policy changes reducing social services for this community as well as the anti-immigrant sentiment. There is a need for a shift on policies endorsing health equity for Hispanics. Social service practitioners need to be aware new trends in this population to address disparities from a preventive perspective and promote health equities in Hispanic population. Social workers in direct practice need to be aware of the prolonged trauma the Hispanic community is living with and understand their struggles living in an antagonistic environment.

53. Focusing on Resilience in Latino Families with Children with Disabilities

Cristina Mogro-Wilson, Ph.D., M.S.W., University of Connecticut

Latino children are at high risk for behavioral and developmental disorders resulting in early placement in special education. Among three to five year olds, Latinos are less likely to recognize letters of the alphabet, participate in storybook activities, count up to at least 20, and write or draw rather than scribble, compared to their White and African American counterparts. Resilience is a process that involves exposure to risk, yet result in successful outcomes despite these experiences of adversity. Despite the number of theoretical models that argue for inclusion of culturally and ethnically diverse populations there are few empirical studies that have examined resilience among Latino children with disabilities. The purpose of this poster is to provide information about the strengths of Latino families for providers to utilize the natural resiliency of Latinos in their practice and interventions. This poster reviewed the literature and the most prominent theoretical models on the resiliency of Latino families and children with disabilities. This information was used to create conceptual model to describe how resilience factors for Latinos can be used by professionals. The four domains of the conceptual model were identified by extrapolating information from the current evidence base. A combination of cultural, community, family and individual factors produce protective mechanisms inherent to many Latinos and offer areas of resiliency. Evidence supports the existence of resilient resources that protects against negative health outcomes. Specific features of the Latino individual such as a positive ethnic identity, achievement of tasks, self mastery and efficacy, and high levels of perceived control, can be utilized as a resource when creating treatment plans. Familism can be strengthened to help with coping, stress and communication between the child and the parents. Understanding the Latino community and how it plays a role in the family’s life, what community supports are available, and the importance of religiosity can all be fostered. In addition the importance of the child to contribute and function within the community is an extremely important component to treatment. Finally, the Latino culture often has family networks and these as that family and family acculturation process should be understood as it relates to the individual, and the family, an acceptance of biculturalism or obtaining a balance between the culture of origin and new culture is essential. Providers working with Latino children and families with special health care needs can utilize this multidimensional model to encompass the entire individual, family, community and culture, to ensure that their services are culturally competent and focus on the strength and resilience of this population. There is a need for more research to identify which aspects of culture are the most relevant to health in the Latino, the variability across Latino subgroups, and the specific pathways that explain their connection with health outcomes.


Nalini Negi, Ph.D., University of Maryland, Baltimore; Avelardo Valdez, Ph.D.; Alice Cepeda, Ph.D.; and Charlie Kaplan, Ph.D., University of Houston

The extent and nature of criminal victimization of Latino immigrants is largely unknown despite reports indicating that crimes against Latinos are rapidly increasing. What has been substantiated is that immigrant criminal victimization is underreported due to the perceived threat of deportation or retaliation. This may be especially true among Latino immigrants that work as day laborers as they are at high risk for risk, yet result in successful outcomes despite these experiences of adversity. Despite the number of theoretical models that argue for inclusion of culturally and ethnically diverse populations there are few empirical studies that have examined resilience among Latino children with disabilities. The purpose of this poster is to provide information about the strengths of Latino families for providers to utilize the natural resiliency of Latinos in their practice and interventions. This poster reviewed the literature and the most prominent theoretical models on the resiliency of Latino families and children with disabilities. This information was used to create conceptual model to describe how resilience factors for Latinos can be used by professionals. The four domains of the conceptual model were identified by extrapolating information from the current evidence base. A combination of cultural, community, family and individual factors produce protective mechanisms inherent to many Latinos and offer areas of resiliency. Evidence supports the existence of resilient resources that protects against negative health outcomes. Specific features of the Latino individual such as a positive ethnic identity, achievement of tasks, self mastery and efficacy, and high levels of perceived control, can be utilized as a resource when creating treatment plans. Familism can be strengthened to help with coping, stress and communication between the child and the parents. Understanding the Latino community and how it plays a role in the family’s life, what community supports are available, and the importance of religiosity can all be fostered. In addition the importance of the child to contribute and function within the community is an extremely important component to treatment. Finally, the Latino culture often has family networks and these as that family and family acculturation process should be understood as it relates to the individual, and the family, an acceptance of biculturalism or obtaining a balance between the culture of origin and new culture is essential. Providers working with Latino children and families with special health care needs can utilize this multidimensional model to encompass the entire individual, family, community and culture, to ensure that their services are culturally competent and focus on the strength and resilience of this population. There is a need for more research to identify which aspects of culture are the most relevant to health in the Latino, the variability across Latino subgroups, and the specific pathways that explain their connection with health outcomes.
55. **Circular Migration by Mexican Female Sex Workers Who are IDUs: Implications for HIV in Mexican Sending Communities**

**Victoria D. Ojeda, Ph.D., M.P.H.; José Luis Burgos, M.D., MPH; and Sarah P. Hiller, M.P.A., UCSD School of Medicine; Remedios Lozada, M.D.; Patronato Pro-COMUSIDA; Gudelia Rangel, Ph.D., El Colegio de la Frontera Norte; Alicia Vera, M.P.H.; and Irina Artamonova, M.S., UCSD School of Medicine; Carlos Magis Rodriguez, M.D., Ph.D., Centro de Investigaciones en Infecciones de Transmisión Sexual, Programa de VIH/SIDA de la Ciudad de México.**

Circular migration and injection drug use increase the risk of HIV transmission in sending communities. We describe circular migration and drug use behaviors of 258 migrant female sex workers who were injection drug users (FSW-IDUs) residing in Tijuana and Ciudad Juarez. In brief, between October, 2008 and July, 2010, 620 FSW-IDUs were recruited into a behavioral intervention study in Tijuana and Ciudad Juarez aiming to reduce injection and sexual risk behaviors associated with HIV and sexually transmitted infection (STI) acquisition. At baseline, participants underwent interviewer-administered surveys and biological testing for HIV/STIs. Surveys elicited data on sociodemographics, lifetime and past month drug behaviors, and HIV testing history. One month after the baseline visit, women completed a migration questionnaire that documented substance use and sex work in the context of migration. The "Determine"® rapid HIV antibody test was administered to determine the presence of HIV antibodies (Abbott Pharmaceuticals, Boston, MA). All reactive samples were tested using an HIV-1 enzyme immunoassay and immunofluorescence assay at the County of San Diego Public Health Laboratory. Those testing HIV-positive were referred to the local HIV-positive municipal health clinic for monitoring and care. This study is limited to Mexico-born FSW-IDUs who were classified as migrants if they were not born and had not lived in Tijuana or Ciudad Juarez their entire lives (n=258); of these, circular migrants were defined as FSW-IDUs who had ever returned to their birth city (n=62). Women who never returned to their birth-community are classified as non-circular migrants. We conducted descriptive analyses of sociodemographic characteristics, drug use, and HIV seroprevalence, stratifying by circular migrant status. Multivariate logistic regression models were constructed to examine factors associated with FSW-IDUs' self-reported return to their birth communities. 24% of FSW-IDUs were circular migrants. HIV prevalence was 3.3% in circular migrants and 6.1% in non-circular migrants; 50% of circular and 82% of non-circular migrants were unaware of their HIV infection. Among circular migrants, 44% (n=27) consumed illicit drugs and 70% of these (n=20) injected drugs in their birthplace. Half of injectors shared injection equipment in their birthplace. Women reporting active social relationships were significantly more likely to return home. Circular migrant FSW-IDUs exhibit multiple HIV risks and opportunities for bridging populations. Regular HIV testing and treatment and access to substance use services is critical for FSW-IDUs and their sexual/drug-using contacts.

56. **"I think that I was even sold": Trafficking and HIV Risk among Female Sex Workers in Tijuana**

**Paula Saravia, B.A.; Jay Silverman, Ph.D.; Shira Goldenberg, M.P.H.; and Sarah P. Hiller, M.P.A., University of California San Diego; Gudelia Rangel, Ph.D., El Colegio de la Frontera Norte; Victoria D. Ojeda, Ph.D., M.P.H., University of California San Diego.**

This study aims to describe the trafficking experiences of FSW-IDUs in Tijuana, their profiles and HIV risk taking/mitigating strategies. In 2009, we conducted qualitative semi-structured interviews with 47 FSW-IDUs in Tijuana, Baja California, Mexico; of these, 7 (i.e., 15%) women identified instances of trafficking. Participants were recruited from a behavioral intervention to reduce drug and sex risks (i.e., "Mujer Más Segura") associated with HIV. We defined FSWs as a community of knowledge who share a discourse on risk based on their personal experience of trafficking. We define trafficking as being kidnapped, held or transported against one’s will or as a minor for the purposes of coercion into sexual servitude, forced prostitution, involuntary servitude or other financial gain. To understand the connections between their experiences of trafficking, drug use, we employed qualitative discourse analysis, examining the interviews (in-language) of 7 cases. Interviews were analyzed in-language. Our analysis illustrates the connections between sex trafficking and the configurations of risk contexts among the FSWs in Tijuana, showing how FSWs' perceptions and representations of risk influence drug abuse practices and knowledge of HIV/AIDS. We present FSWs' narratives as trajectories characterized by trafficking and forced integration processes where girls needed to learn values and develop strategies for adapting to and surviving within contexts of structural violence. From their perspective, growing up with family members who used drugs influenced their life, forcing them to leave the family household at an early age (11-14 years old); women asserted that their individual experience of domestic violence and sexual abuse at early age resulted in home abandonment (forced and voluntary) and sex trafficking. Important distinctions for understanding trafficking are those between parents who were “clean” versus those who used drugs, and the “weak” or “strong” FSWs’ personality. According to FSWs, at home they feared their abuse by their parents or siblings, whereas in the streets of Tijuana they feel more secure because they know the people and the contexts of violence so they can avoid them. Thus, risk is conceptualized in reference to the uncontrolled spaces (e.g., the U.S.) where they are not included in any social network. They show fear and distrust of state institutions, to which STI prevention programs primarily connect them. FSW-IDUs’ narratives of trafficking suggest that women have developed coping strategies (e.g., avoid sites in Tijuana the do not control; work independently vs. in bars/clubs; obtain own housing; establish relationships with other vulnerable persons but who do not expect full commitments), including in relation to HIV and drug use behaviors, largely without the support of state institutions. Identity processes as FSWs are related to emotional characteristics required for coping with trafficking experiences as well as sexual violence. Public health interventions should consider FSW-IDUs as active subjects who have developed their own strategies around risk and risk taking and work to optimize existing interventions within their conceptual framework and lived experience.
57. U.S. Cultural Involvement and its Association with Suicidal Behavior among Youth in the Dominican Republic
Juan B. Pena, Ph.D., Luis H. Zayas, Ph.D., and Peter Cabrera, M.S.W., Washington University in St. Louis; and William Butts, Ph.D., University of Southern California.

U.S. Cultural Involvement parallels the process known as economic globalization and refers to the penetration of cultural influences (e.g. US cultural influence) on the lifestyle, values, norms, and the retention of cultural heritage in youth around the world. In this report we examine how cultural globalization via several US cultural involvement indicators relate to suicide attempts among a nationally representative sample of public high school students in the Dominican Republic. We focus on suicide behavior because it has been identified as a growing worldwide public health concern for youth and young adults. Moreover, suicide attempts are associated with hospitalization, future attempts, and future death by suicide. We analyzed data from a nationally representative sample of youth attending high school in the Dominican Republic (N=8,446). Our outcome was a suicide attempt during the past year. US cultural involvement indicators included time lived in the US, the number of friends who have lived in the US, English proficiency and use of US electronic media and language. US electronic media and language, time lived in the US, and number of friends who have lived in the US had robust positive relationships to suicide attempt even when included in the same model and after controlling for demographic covariates. Our results are consistent with previous research that has found increased risk for suicide or suicide attempts among Latino youth with greater US cultural involvement and adds to this research by finding this result in a non-immigrant Latin American sample. The results of our study also identify suicide attempts as a major public health problem among youth in the Dominican Republic.

58. Hispanic Adolescents, Substance Use, and Social Strain: A Partial Test of General Strain Theory on an Under-Researched Population
Robert L. Perez, Ph.D., The University of Akron; and Jennifer L. Steele, Ph.D., Walsh University.

While Hispanic substance use among adolescents appears to be increasing, ethnic-specific theory development and research continues to lag. General strain theory is used to assess the impact of social factors associated with substance use among Hispanics. We test the effects of strain (ethnic-based discrimination; verbal bullying; physical victimization; witnessing violence) on two substance use outcome measures: marijuana and alcohol use. Negative affective states (fear; depression) and religiosity were included in our analysis as well as other controls. We collected data on a wave three of the National Latino and Asian American Youth Study. The results of our study were consistent with prior research. Substance use was higher among adolescents with greater strain experiences, but not when controlling for gender, income, recidivism, and religiosity. Future research concerning ethnic strain is needed.

59. The Effects of Stress and Depressive Symptoms on CD4, CD8 and NK Cells among Homeless Speedball Users in Puerto Rico
Juan Carlos Reyes, Ed.D., Universidad Central del Caribe; Tomás Matos, M.S., Universidad Central del Caribe; Juan Negrón, Ph.D.; and José Calderón, M.S., University of Puerto Rico; Eddy Ríos-Olivares, Ph.D.; and Rafaela Robles, Ed.D., Universidad Central del Caribe.

There is growing evidence that stressful events are involved in the decrease of immune status. Leserman found stress-associated reduction in killer lymphocytes in HIV-infected men and that severe stress and depressive symptoms were related to decline in several lymphocyte subsets. The purpose of this study was to examine the effect of stress and depressive symptoms on the immune status of the homeless speedball users in Puerto Rico. The sample was comprised of 400 drug users not in drug treatment, recruited in street settings. Participants were classified as speedball (heroin and cocaine mixed together) users, if they reported speedball use during the previous 48 hours, and had a positive urinalysis results to both heroin and cocaine. HIV infection was detected by enzyme-linked immunosorbent assay and the results were confirmed by Western blot and PCR. Two color flow cytometry was used to analyze lymphocyte subpopulations. The survey instrument collected information on sociodemographics, drug use patterns, and stressful life events. Depressive symptoms were assessed using the Center for Epidemiologic Studies-Depression (CES-D). T test for independent samples and ANOVA were used in the analysis. The sample was predominantly male (77.6%) and the mean age was 32.8 years old. The overall prevalence of HIV infection was 17%. Multivariate linear regression showed that speedball users with higher levels of stress were more likely to have lower CD4+ counts (p=0.020), lower numbers of NK cells (p=0.009) and higher CD8+ counts (p=0.014) than those who reported lower levels of stress. Participants with higher depressive symptoms were more likely to have lower percentage of NK cells (p=0.018), lower CD4/CD8 ratio and lower percentage of CD4+ cells (p=0.020) compared with subjects with lower depressive symptoms. Further studies are necessary to determine whether treating stress and depressive symptoms can improve the immune status.

NEUROSCIENCE

60. Synthesis and Characterization of Nickel(II) Complexes Of Schiff Bases and Other Ligands as Potential Models For Molecular Magnets
Kouassi Aykorea, Yilima Gutninea, Raymond Butcheria; aDepartment of Chemistry, Howard University, Washington DC.

Nickel(II) Urease, a di-nuclear nickel (II) enzyme that catalyzes urea into ammonia and carbonic acid, has encouraged further works in regard to understanding the roles of nickel, its dependence on other metals such as iron (Fe), or possible existence of other nickel enzymes unknown to date. The specific roles of nickel, its reaction mechanism at the active sites of known enzymes are unclear. To understand its chemistry, the focus has been on synthesizing new complexes nickel (II) using Schiff bases, amino acid Schiff bases or a mixture of different oxygen and nitrogen donor ligands as great sources of electron transfer (redox) sources.
In this study mono-nuclear, di-nuclear and hepta-nuclear nickel (II) complexes have been synthesized and characterized structurally using X-ray diffractionometer, spectrochemically by UV-vis, electrochemically by cyclic voltammetry, and magnetically to room temperature magnetic susceptibility measurements. At room temperature, almost all the octahedral complexes displayed paramagnetic properties ranging from 2.5 BM to 3.5 BM. The UV-vis results confirmed the octahedral coordination environment of most of the complexes as revealed by the X-ray diffraction analysis. In total, four mono-nuclear salens (complexes 1, 2, 3, 4), three mono-nuclear with mix ligands (5, 6, 7), two di-nuclear with bridging sodium(s) (8, 9), three tetra-nuclear with bromide or perchlorate counter ions (10, 11, 12), three poly-nuclear clusters with Ni-O-Ni bridge (13, 14, 15), and two six-coordination-environment manganese salens (18, 19) were successfully synthesized and characterized. Note that the two manganese salen complexes were synthesized to confirm that Mn3+ prefers octahedral environment with salens as supposed to square planar for Ni2+. Based on literature, thirteen of these complexes are new and present attractive information that can be exploited in areas such chemical catalysis, pharmaceutical stereo-selectivity, electronic data and energy source as well as protein stabilization such as DNA fixation and repair.

61. Nanoparticle Encapsulated Biodegradable PHBV for Bone Tissue Engineering
   K. Ayikoe, L. Moorea, J. Stubbs Ilp, O. Wilsonc, D. Raghavanac, *Department of Chemistry, Howard University, Washington DC, bDepartment of Microbiology, College of Medicine, Howard University, Washington DC, cDepartment of Biomedical Engineering, Catholic University, Washington DC

Conventional treatment of osteomyelitis involves surgical intervention of dead bone tissue and systemic administration of antibiotics. The primary objective of the study is to develop antibiotic containing biodegradable polymeric implants that support bone tissue growth and minimizes infection. Many new polymers and polymeric composites have been assayed for a broad range of applications including drug delivery and tissue engineering. One polymer in particular that has drawn considerable attention for bone tissue formation is poly (3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV). In this study, an attempt was made to encapsulate nanoparticles (genticam or silver) in PHBV matrix and study the drug release rates. The selection of the nanoparticles was based on well established antimicrobial characteristics. Gentamicin release in phosphate buffer (pH 7.4) solution was quantified by reacting with ninhydrin and recording the absorbance in the solutions at 400nm. Silver nanoparticle was quantified by acid digestion followed by atomic absorption analysis. Moreover, nanoparticles encapsulated genticam were tested against three different clinical isolates, i.e., Staphylococcus aureus, Escherichia coli and Pseudomonas aeruginosa in a standard antimicrobial assay. Details pertaining to the encapsulation protocol and the preliminary results will be presented.

62. Multiscale Imaging Characterization of Dopamine Transporter Knockout Mice Reveals Regional Alterations in Spine Density of Medium Spiny Neurons
   Monica L. Berlanga, Ph.D.; Diana L. Price, Ph.D.; Binh S. Phuong, B.S.; Richard Giuly, M.S.; Masako Terada, M.S.; and Naoko Yamada; University of California, San Diego; Michel Cyr, Ph.D.; Mark G. Caron, Ph.D.; and Aki Laakso M.D., PhD., Duke University Medical Center; Maryann E. Martone, Ph.D.; and Mark H. Ellisman, Ph.D., University of California, San Diego

The dopamine transporter knockout (DAT KO) mouse is a model of chronic hyperdopaminergia used to study a wide range of neuropsychiatric disorders such as schizophrenia, attention deficit hyperactivity disorder (ADHD), drug abuse, depression, and Parkinson's disease (PD). Early studies characterizing this mouse model revealed a subtle, but significant, decrease in the anterior striatal volume of DAT KO mice accompanied by a decrease in neuronal cell body numbers. The present studies were conducted to examine medium spiny neuron (MSN) morphology by using these earlier reports to include multiscale imaging studies using correlated light microscopy (LM) and electron microscopy (EM) techniques. Specifically, we set out to determine if chronic hyperdopaminergia results in quantifiable or qualitative changes in DAT KO mouse MSNs relative to wild-type (WT) littermates. Using Neurolucida Explorer’s morphometric analysis, we measured spine density, dendritic length and synapse number at ages that correspond with the previously reported changes in striatal volume and progressive cell loss. Next, thick sections containing MSN dendritic segments located at a distance of 20-60 μm from the cell soma, a region of the dendrite where spine density is reported to be the highest, were analyzed using electron microscope tomography (EMT). Because of the resolution limits of LM, the EM analysis was an extra measure to assure that our analysis included nearly all spines. Light microscopic analysis using Neurolucida tracings of photoconverted striatal MSNs revealed a highly localized loss of dendritic spines on the proximal portion of the dendrite (30 μm from the soma) in the DAT KO group. Spine density measurements collected from the EMT data revealed only a modest decrease in the DAT KO group (n=3 mice) as compared to the age-matched WT controls (n=3 mice), a trend that supports the LM findings. Finally, a synaptic quantification using unbiased stereology did not detect a difference between DAT KO mice (n=6 mice) and WT controls (n=7 mice) at the EM level, supporting the focal nature of the early synaptic loss. These findings suggest that DAT KO mice have MSNs with highly localized spine loss and not an overall morphologically distinct cell shape. The characterization of morphological changes in DAT KO mice may provide insights about the neural substrates underlying altered behaviors in these mice, with relevance for human neurological disorders thought to involve altered dopaminergic homeostasis. Results from this study also indicate the difficulty in correlating structural changes across scales, as the results on fine structure revealed thus far are subtle and non-uniform across striatal MSNs. The complexities associated with multiscale studies are driving the development of shared online informatics resources by gaining access to data where it is being analyzed.

63. Dose-Related Reduction in Neuronal and Doublecortin Positive Cell Number in Hippocampus Following Prenatal Ethanol Exposure in Vervet Monkey
   Mark W. Burke, Ph.D., Howard University; Roberta M. Palmour, Ph.D., McGill University; Hocine Slimani, BSc.; and Montreal; Maurice Pitto, Ph.D., University of Montreal; Frank R. Ervin, M.D., McGill University

Fetal alcohol spectrum disorder (FASD) is a chronic debilitating condition resulting in behavioral and intellectual impairments and is considered the most prevalent form of preventable mental retardation in the industrialized world. Two-year old offspring of vervet monkey (Chlorocebus sabaeus) dams drinking about 2.3 (1.63 - 2.79) g ethanol per kg maternal body weight 4 days per week during the last third of pregnancy had significantly lower numbers of CA1 (-51.6%), CA2 (-51.2%) and CA3 (-42.8%) hippocampal neurons, as compared to age-matched sucrose controls. In the present study, we examined these same measures in 12 fetal alcohol exposed (FAE) offspring with a larger range of exposures (1.01 - 4.01 g/kg/day; total ethanol exposure 24 – 158 g/kg; duration of exposure was 67 ± 19 days) along with doublecortin immunoreactivity (DCX+), a putative marker for immature neurons. Using design-based stereology, we report here significant dose effects with respect to the number of CA1, CA2 and CA3 neurons, as well as DCX+ cells in the granular layer of the dentate gyrus. There was a significant negative correlation between daily dose and neuronal population in CA1 (r2=0.70), CA2 (r2=0.74), and CA3 (r2=0.70). Likewise there was a negative correlation between total ethanol exposure and neuronal population in CA1 (r2=0.40), CA2 (r2=0.40), and CA3 (r2=0.37). There was also a significant negative correlation between the DCX+ neuronal population in the granular layer of the dentate gyrus and either daily dose (r2=0.53) or total ethanol exposure (r2=0.36). This study shows that the neuroanatomical sequelae of fetal ethanol exposure in vervet offspring are dose-responsive. Neuron numbers in animals with average doses below 1.5 g ethanol/kg were within the normal range, but the present data are not sufficient to determine whether there is a threshold for this effect.
64. Viral-Mediated Expression of Extracellular Signal-Regulated Kinase (ERK) in the Nucleus Accumbens Regulates Responsiveness to Cocaine and Stress
Sergio Iturriago, M.A., Florida State University; Eric Nester, M.D., Ph.D., Mount Sinai School of Medicine; Carissa Guzman-Sanchez, Ph.D., Florida State University

Extracellular signal-regulated kinase (ERK) plays a role in the cellular and behavioral responses to drugs of abuse and stress. Chronic exposure to cocaine or morphine elevates ERK activity in the nucleus accumbens (NAcc) of the striatum, a key neural substrate for drugs of abuse. However, to date most of the evidence for a role of ERK relies on the use of inhibitors that do not discriminate between two ERK subtypes, ERK1 and ERK2. To better understand the involvement of ERK2 in mediating drug- and stress-induced behavioral responding, we delivered herpes simplex virus (HSV) vectors that encode ERK2, a dominant negative inhibitor of ERK2, into the NAcc, and measured the rewarding properties of cocaine (0.5, 10 mg/kg) as measured by the conditioned place preference (CPP) paradigm. In addition, we assessed responding to behavioral stress as measured by the forced swim test (FST). We show that rats receiving microinjections of HSV-wtERK2 into the NAcc spent significantly more time in cocaine-paired compared to saline-paired compartments, as compared to rats infected with a control virus, which were injected off of the HSV-dnERK2 blocked the effects of cocaine. Interestingly, HSV-wtERK2-treated rats showed significantly shorter latencies to immobility in the FST (a pro-depressant effect), while HSV-dnERK2 resulted in longer latencies to immobility (an antidepressant-like effect). Together, these data support a potentirole for ERK2 within the NAcc in mediating behavioral responses to drugs of abuse and stress.

65. Adolescent Rats are Resistant to Adaptations in Excitatory and Inhibitory Mechanisms that Modulate Mesolimbic Dopamine during Nicotine Withdrawal

Luis A. Natividad, M.A., University of Texas at El Paso; Loren H. Parsons, Ph.D., The Scripps Research Institute; James E. Orilla, Ph.D.; Oscar V. Torres, M.A.; and Laura E. O’Dell, Ph.D., University of Texas at El Paso

Adolescent smokers report enhanced positive responses to nicotine and fewer negative effects of nicotine and withdrawal from this drug than do adults, and this is believed to propel high levels of tobacco use during this critical developmental period. Differential dopaminergic responses to nicotine are thought to underlie these age-related effects, since adolescent rats experience lower withdrawal-related deficits in nucleus accumbens (NAcc) dopamine than do adults. This study examined whether these distinct dopaminergic responses to withdrawal result from age-related differences in excitatory or inhibitory transmission in the ventral tegmental area (VTA) dopamine cell body region. Adolescent (post-natal day 28-30; n=14) and adult (post-natal day 60-75; n=14) rats were first implanted with subcutaneous pumps delivering a constant dose of nicotine (13.5 mg/kg/day for adolescents, 9.0 mg/kg/day for adults; base) for 14 days. On day 13, rats were implanted with microdialysis probes aimed at the NAcc and ipsilateral VTA. In vivo microdialysis procedures were then conducted to monitor extracellular levels of dopamine in the NAcc and glutamate and gamma-aminobutyric acid (GABA) in the VTA of adolescent and adult rats experiencing precipitated nicotine withdrawal with the nicotine receptor antagonist mecamylamine. Our results showed that NAcc dopamine was decreased to a greater extent in adult versus adolescent rats. Concomitant measures of VTA amino acid levels in adults showed that nicotine withdrawal produced significant deficits in VTA glutamate levels (56% decrease) along with significant elevations in VTA GABA levels (38% increase), consistent with an overall inhibition of dopamine cell activity. In contrast, adolescents did not exhibit significant changes in either VTA glutamate or GABA levels during nicotine withdrawal. Correlation analyses were conducted to examine whether amino acid levels in the VTA regulate developmental differences in NAcc dopamine during withdrawal. Dopamine and glutamate were positively correlated in both age groups and the correlation was stronger in adults as compared to adolescents. Dopamine and GABA were negatively correlated in adults; however, these measures were positively correlated in adolescents. A comparison across age revealed that the correlation between GABA and dopamine was also stronger in adults as compared to adolescents. These results indicate that adolescents display resistance to withdrawal-related neurochemical processes that inhibit mesolimbic dopamine function in adults experiencing nicotine withdrawal. Specifically they suggest that adolescents experience enhanced excitation and reduced inhibition in the VTA dopamine cell body region that facilitates decreases in NAcc dopamine during withdrawal. Our findings provide a potential mechanism involving VTA amino acid neurotransmission that mediates developmental differences in nicotine withdrawal.

66. The Rewarding Effects of Nicotine are Enhanced in Diabetic Rats
Francisco Roman; Luis A. Natividad; Evelyn Escalante; Ivan D. Torres; and Laura E. O’Dell, University of Texas, El Paso

Previous reports have suggested that patients with diabetes are prone to the harmful effects of tobacco abuse. However, it is unclear whether patients with diabetes experience enhanced rewarding effects of nicotine as compared to healthy controls. Thus, the goal of the present study was to compare the rewarding effects of nicotine among diabetic rats displaying blood glucose levels of 300-500 mg/dL as compared to control rats with normal glucose levels of 150 mg/dL. Male Wistar rats were first trained to perform operant responses for food and water in the chambers where they would receive 23-hour access to nicotine. Following food and water training, the rats were given vehicle or streptozotocin (STZ; 45 mg/kg). STZ is a drug that produces toxicity to the beta cells of the pancreas leading to hyperglycemia in the rats. Following diabetes induction, the rats were then given access to a lever that produced a nicotine infusion on an FR1 schedule of reinforcement (0.03 mg/kg/0.1 ml infusion; base). The rats were allowed to self-administer this dose of nicotine for 10 days. Blood glucose levels and body weights were examined every day prior to the start of each session. The results reveal that diabetic rats displayed enhanced nicotine intake in a graded manner, such that rats displaying the highest levels of nicotine intake also displayed high blood glucose levels. Diabetic rats also displayed robust increases in food and water intake relative to insulin-producing pancreatic cells. Following diabetes induction, the rats were then given access to a lever that produced a nicotine infusion on an FR1 schedule of reinforcement (0.03 mg/kg/0.1 ml infusion; base). The rats were allowed to self-administer this dose of nicotine for 10 days. Blood glucose levels and body weights were examined every day prior to the start of each session. The results reveal that diabetic rats displayed enhanced nicotine intake in a graded manner, such that rats displaying the highest levels of nicotine intake also displayed high blood glucose levels. Diabetic rats also displayed robust increases in food and water intake relative to insulin-producing pancreatic cells. Following diabetes induction, the rats were then given access to a lever that produced a nicotine infusion on an FR1 schedule of reinforcement (0.03 mg/kg/0.1 ml infusion; base). The rats were allowed to self-administer this dose of nicotine for 10 days. Blood glucose levels and body weights were examined every day prior to the start of each session. The results reveal that diabetic rats displayed enhanced nicotine intake in a graded manner, such that rats displaying the highest levels of nicotine intake also displayed high blood glucose levels. Diabetic rats also displayed robust increases in food and water intake relative to insulin-producing pancreatic cells. Following diabetes induction, the rats were then given access to a lever that produced a nicotine infusion on an FR1 schedule of reinforcement (0.03 mg/kg/0.1 ml infusion; base). The rats were allowed to self-administer this dose of nicotine for 10 days. Blood glucose levels and body weights were examined every day prior to the start of each session. The results reveal that diabetic rats displayed enhanced nicotine intake in a graded manner, such that rats displaying the highest levels of nicotine intake also displayed high blood glucose levels. Diabetic rats also displayed robust increases in food and water intake relative to insulin-producing pancreatic cells. Following diabetes induction, the rats were then given access to a lever that produced a nicotine infusion on an FR1 schedule of reinforcement (0.03 mg/kg/0.1 ml infusion; base). The rats were allowed to self-administer this dose of nicotine for 10 days. Blood glucose levels and body weights were examined every day prior to the start of each session. The results reveal that diabetic rats displayed enhanced nicotine intake in a graded manner, such that rats displaying the highest levels of nicotine intake also displayed high blood glucose levels. Diabetic rats also displayed robust increases in food and water intake relative to insulin-producing pancreatic cells. Following diabetes induction, the rats were then given access to a lever that produced a nicotine infusion on an FR1 schedule of reinforcement (0.03 mg/kg/0.1 ml infusion; base). The rats were allowed to self-administer this dose of nicotine for 10 days. Blood glucose levels and body weights were examined every day prior to the start of each session. The results reveal that diabetic rats displayed enhanced nicotine intake in a graded manner, such that rats displaying the highest levels of nicotine intake also displayed high blood glucose levels. Diabetic rats also displayed robust increases in food and water intake relative to insulin-producing pancreatic cells. Following diabetes induction, the rats were then given access to a lever that produced a nicotine infusion on an FR1 schedule of reinforcement (0.03 mg/kg/0.1 ml infusion; base). The rats were allowed to self-administer this dose of nicotine for 10 days. Blood glucose levels and body weights were examined every day prior to the start of each session. The results reveal that diabetic rats displayed enhanced nicotine intake in a graded manner, such that rats displaying the highest levels of nicotine intake also displayed high blood glucose levels. Diabetic rats also displayed robust increases in food and water intake relative to insulin-producing pancreatic cells. Following diabetes induction, the rats were then given access to a lever that produced a nicotine infusion on an FR1 schedule of reinforcement (0.03 mg/kg/0.1 ml infusion; base). The rats were allowed to self-administer this dose of nicotine for 10 days. Blood glucose levels and body weights were examined every day prior to the start of each session. The results reveal that diabetic rats displayed enhanced nicotine intake in a graded manner, such that rats displaying the highest levels of nicotine intake also displayed high blood glucose levels. Diabetic rats also displayed robust increases in food and water intake relative to insulin-producing pancreatic cells.
68. The Rewarding Effects of Alcohol are Enhanced in Female Versus Male Rats
Oscar V. Torres, M.A.; Ellen M. Walker, B.S.; Blanca S. Beas, B.S.; Adrian K. Muñiz; Evelyn Escalante; and Laura E. O’Dell, Ph.D., University of Texas at El Paso

Alcoholism is a major public health problem particularly for women who appear to be more susceptible to alcoholism relative to men. Despite the magnitude of the problem, the underlying mechanisms of this phenomenon remain unclear. Thus, the objective of this study was to examine whether the rewarding effects of alcohol were greater in female versus male rats. To address this question we utilized place conditioning procedures that assess both rewarding and aversive effects of alcohol. To examine the influence of ovarian hormone on alcohol reward, a separate group of ovariectomized (OVX) female rats was included in our study. Rats were first tested for their initial preference for either of two distinct compartments of our conditioning apparatus. After a seven day waiting period rats received one of various doses of alcohol (0, 0.5, 1.0, 2.0 or 2.5 mg/kg; ip) and were confined to their initially non-preferred side of our conditioning apparatus for 30 minutes. On alternate days, rats received saline and were confined to their initially-preferred compartment for 30 minutes. Following conditioning procedures, rats were re-tested for their preference for either chamber. In order to assess sex differences in alcohol metabolism, a separate group of male, female, and OVX female rats received the same doses of alcohol and blood alcohol levels (BALs) were compared 30 minutes later. Overall, ethanol produced place conditioning in an inverted U-shaped dose-response manner. Female rats displayed greater rewarding effects of alcohol as compared to all other groups. Males and OVX female rats did not display rewarding effects of alcohol at any dose. All groups displayed similar aversive effects at the highest dose of alcohol. There were no sex differences in BALs, suggesting that our findings are not due to differences in alcohol metabolism. These findings suggest that females may be more vulnerable to alcoholism due to enhanced rewarding effects of alcohol. This effect appears to be mediated via the presence of ovarian hormones since OVX females did not display rewarding effects of alcohol. Our studies suggest that females experience enhanced sensitivity to alcohol reward. Thus effective treatment strategies for alcoholism in females should target rewarding effects that drive alcohol abuse as compared to males.

69. High Fat Diet Intake during Periadolescence Impairs Acquisition of a High-Fat Food-Induced Conditioned Place Preference in Adulthood
Arturo R. Zavala, Ph.D., California State University, Long Beach; Gregory Privitera, Ph.D., Saint Bonaventure University; and Federico Sanabria, Ph.D., Arizona State University

Consumption of high fat (HF) foods has unfavorable effects in animals, such as obesity and diabetes. This has been well established when the animals are predisposed to the HF diet during pregnancy and/or weaning. HF diets also impact behavior, particularly when the diet is consumed for months after weaning, and includes impairments in spatial learning. Relatively little research has examined the behavioral effects of feeding rats with HF diets during the peridolescent period (postnatal days (PD) 21-40). In the present study, we examined the effect of a low or high fat diet consumed during peridolescence on high fat food-induced conditioned place preference (CPP) in adulthood. Rats were randomly assigned to consume a HF or a low fat (LF) diet during postnatal days (PD) 21-40 and were then placed back on a standard lab chow diet. A 20-day CPP procedure, using HF Cheetos® as the unconditioned stimulus (US), began either the next day (PD 41) or 40 days later (PD 81). A separate group of adult rats were given the HF diet for 20 days beginning on PD 60, and then immediately underwent the 20-day CPP procedure beginning on PD 81. Peridolescent exposure to a LF diet or adult exposure to a HF diet did not interfere with the development of a HF food-induced CPP, as these groups exhibited robust preferences for the HF Cheetos® food-paired compartment. However, peridolescent exposure to the HF diet impaired the development of a HF food-induced CPP regardless of whether it was assessed immediately or 40 days after the exposure to the HF diet, and despite showing increased consumptions of the HF Cheetos® during conditioning. Present data suggests that intake of a HF diet during peridolescence has long-lasting effects on CPP learning that persists into adulthood and that this developmental period may be particularly sensitive to unbalanced diet manipulations.

POLICY RESEARCH

70. Regulatory Compliance of Residential Treatment Clinics in the West Central State of Jalisco, Mexico
Octavio Campollo, CUCS University of Guadalajara; Claudia M. Prado; and Fernando Diaz, (CECAJ); James K. Cunningham, University of Arizona.

A significant number of the estimated 1800 private or NGO run addiction clinics in Mexico provide residential treatment. In 2009, Mexico updated the official Mexican norm (NOM 028) for the prevention, treatment and control of addictions. This study examines NOM 028 compliance among residential treatment clinics in Mexico’s west central state of Jalisco. We conducted an on-site survey of 191 residential clinics in Jalisco, and examined the 15 most relevant NOM 028 regulatory requirements, including registration, opening notice, authority inspection visit, medical liability, medical registration, county license, and national addiction council (CONADIC) registration. We also surveyed the physical condition of facilities and had a face to face interview with the director or administrator. Each of the 15 requirements was scored for compliance using a 5-point index: extremely bad, bad, sufficient, good and excellent. The type/modality of clinics was: 77% self-help, 17% combined medical/self-help (M/SH), 5% medical. None of the clinics received excellent ratings on all 15 regulatory aspects. The combined index score for regulatory and physical condition resulted in good compliance for only 22.2% of medical clinics, 18.8% of M/SH clinics and 4.7% of self-help clinics. The medical and M/SH clinics had higher scores than the self-help clinics primarily due to better compliance on medical and psychological evaluations and facilities' physical condition. Clinic type/modality differed little regarding items such as knowledge of the NOM, medical liability, inspection visit and opening notice. None of the clinics fulfilled 100% of the NOM 028. Although medical and combined M/SH clinics received higher index scores, this was due primarily to better ratings on a few aspects of the regulations. Regardless of type/modality, only a small percentage of clinics received good overall compliance scores. The findings indicate a need for NOM 028 compliance training in clinics throughout Jalisco.
71. Relationship Between Human Development and Drug Use
Salazar Silva Fernando, Ph.D. Universidad Peruana Cayetano Heredia; Jorge Ameth Villatoro Velázquez, BSc; and Natania Fróylan Oliva Robles, National Institute of Psychiatry Mexico; Marya Hynes Dowell, MHS; and Maria De Marco, Graduate Student Inter-American Drug Abuse Control Commission

Human Development Index is currently considered a reference indicator to account the social and economic situation experienced by countries. This study was conducted using the database from the study “Guiding Elements for Public Policies on Drugs in the Sub region - First Comparative Study on Drug Use and Associated Factors in Population of 15 to 64 years”, held in Uruguay, Bolivia, Chile, Peru, Ecuador and Argentina. Target was urban population, both sexes 12 to 65 years. Samples were stratified, three-staged and probabilistic. Sample sizes were theoretical with the inclusion of a non-response rate. Prevalence of drug consumption during last year and last month prior to the survey is higher in countries with high HDI compared with medium HDI countries. Lifetime prevalence of alcohol consumption is higher in countries with medium HDI compared with those with high HDI. There is less lifetime prevalence of legal drugs of countries with higher HDI and an equal rate of cigarette consumption. High development index implies that inhabitants of a country have a long and healthy life, more access to knowledge and a decent standard of living. Population with a favorable view on these indicators, are not only exposed but also, active drug users. To a higher index of human development, higher are drug consumption rates which indicate that although human development index can reflect material or economic improvements not necessarily is traduced in the human value of the people or society and does not assure quality of life or wellbeing.

PHYSIOLOGY

72. Takotsubo Cardiomyopathy
Licurgo Cruz, M.D., Pontificia Universidad Catolica Madre y Maestra
Tako-Tsubo syndrome is a dreadful illness (albeit quite rare) that appears under circumstances of exceptional and extreme stress, at times associated with anger. Tako-tsubo Cardiomyopathy or Syndrome is also known as: neurogenic myocardial stunning; stress cardiomyopathy; stress-induced cardiomyopathy; transient left ventricular apical ballooning; “ampulla” cardiomyopathy; “broken heart syndrome”. The diagnosis of tako-tsubo syndrome can only be made after excluding: coronary artery disease (especially proximal left main or left anterior coronary artery stenosis); acute coronary syndrome; acute myocardial infarction; myocarditis, pericarditis, aortic dissections and so forth. We reviewed all patients undergoing percutaneous coronary angiogphia, who had ECG changes, positive enzymes in the period from January 2009 to March 2011, and who had no coronary obstruction or aorica disease, where the mobility of the left ventricle was altered. Ventriculography were performed and we show that three of these patients had cardiomyopathy of takosutbo. Our universe was 768, and 3 of them had clinical and angiographic findings of takotsubo cardiomyopathy. Despite being a rare entity in our environment is more common than the literature mentioned. We must conduct further studies with larger numbers of patients to detect is disease.

73. Impact of Chronic Δ^2-Tetrahydrocannabinol (THC) on Vaginal Markers of Inflammation in SIV-infected Macaques.
Boos, Elise, N.J. LeCapitaine, C. Vande Stouwe, A. Amedee, P.E. Molina, Department of Physiology, Alcohol and Drug Abuse Center of Excellence, LSUHSC School of Medicine, New Orleans, LA, 70112.

With the advent of highly active antiretroviral therapy, human immunodeficiency virus (HIV) infection has become a chronic disease frequently co-existing with chronic drug abuse, including that of marijuana. Cannabinoids, the principal chemical constituents of marijuana, exert neurobehavioral effects and in addition have the potential of affecting the immune system. Our studies have demonstrated that chronic administration of Δ^2-tetrahydrocannabinol (Δ^2-THC), the major psychoactive cannabinoid in marijuana, decreases simian immunodeficiency virus (SIV) disease progression, increases survival and decreases viral replication and tissue inflammation in male rhesus macaques. Whether similar protective effects are achieved in female SIV-infected macaques is not known. The vaginal compartment is the major route of heterosexual HIV acquisition and transmission and the primary site of HIV transmission from mother to child. Vaginal mucosal inflammation has been shown to be associated with increased viral replication and shedding. We examined the impact of chronic Δ^2-THC administration (0.32 mg/kg, 2x daily) on cytokine levels (as markers of inflammation) in the vaginal compartment of female rhesus macaques inoculated intravenously with SIV (SIVmac251; 100 TCID50/ml, iv) 28 days after initiating chronic Δ^2-THC. Vaginal secretions were collected using Merocel sponges and the supernatant extracted was analyzed for cytokine levels using a Luminex Multi-plex platform during the first three months post-infection. Cytokine concentrations were normalized to protein levels measured colorimetrically. Our results show lower IL-1β, IL-6 and TNF-α concentrations in vaginal secretions of THC-treated SIV-infected (THC/SIV) as compared to vehicle-treated SIV-infected (VEH/SIV) female macaques during viral set-point (p=NS). Cytokine concentrations of IL-1β, IL-6 and TNF-α in VEH/SIV appear higher during pro-estrous as compared to estrous periods. This differential is not as marked in THC/SIV animals, suggesting that THC may attenuate the fluctuation of pro-inflammatory cytokines in the vaginal compartment over the course of the estrus cycle. The correlation between inflammatory markers and viral shedding remains to be established. Understanding the effects of Δ^2-THC on viral shedding in the vaginal compartment will lead to identification and development of strategies to diminish risk of HIV transmission. Supported by DA020419 and DA030053 & LSUHSC Summer Research Program.
Poster Abstracts Session 2 Saturday August 27, 2011
8:30 AM - 10:00 AM

SOCIAL AND BEHAVIORAL SCIENCES

80. Interplay Between Social-Structural Conditions and Self-Esteem: A Multi-Level Analysis Among Latinos, Blacks, and Asians

Sandra P. Arevalo-Garcia, Northeastern University

There is evidence of a link between self-esteem, mental health and health behaviors. Positive thinking about oneself can moderate the impact of lifetime stressors. Psychosocial theories have postulated a dynamic interplay between social-structural conditions and self-esteem. Yet most studies on self-esteem have focused on intra- and interpersonal-processes. This study tested associations between a number of structural factors and self-esteem among Blacks, Latinos and Asians using data from the Multi-City Survey on Urban Inequality merged with Census-derived measures of segregation and neighborhood context. In models stratified by race/ethnicity, using three-level (individuals-neighborhoods-counties) hierarchical linear regressions in HLM, Blacks living in areas where Whites held less negative Black stereotypes beliefs had significantly higher scores on self-esteem (B=0.966; SE=0.242; p<0.01) in crude models. This association remained significant after adjusting for covariates, neighborhood affluence, neighborhood stability, and individual’s family income and perceived neighborhood’s quality. Latinos living in higher segregated areas (Multi-group Entropy-Theil’s H index) had significantly lower scores on self-esteem (B=-0.016; SE=0.007; p<0.05) in crude models and after adjusting for covariates, neighborhood stability, neighborhood affluence, perceived neighborhood, skin color, and attendance to religious services. Asians living in higher segregated areas (White-Asian Isolation Index) had significantly lower scores on self-esteem (B=-0.033; SE=0.006; p<0.0001) in crude models and after adjusting for covariates. This association was mediated by neighborhood’s proportion of Asian’s linguistic isolation. Understanding how social-structural conditions influence self-esteem requires multi-level methods and the inclusion of various racial/ethnic groups to understand and contrast the ways in which these structures operate at the individual level.

81. Examining Risk and Protective Factors for Alcohol and Drug Use Among Latino Day Laborers

Guadalupe A. Bacio, M.A. & Lara A. Ray, Ph.D., University of California, Los Angeles

In any one day, as many as 117,600 individuals in the U.S. are looking for day labor, the majority of which are immigrants from Latin America. Day laborers encounter many stressors including job instability, low, unpredictable wages, and unsafe work environments. In addition, most day laborers report abuse by their employers, intimidation by authorities, and harassment by the communities in which they seek employment. Despite a number of risk factors for substance use, very little is known about alcohol and drug use in this population. The limited extent literature suggests that alcohol and drug use rates among Latino day laborers increase as they spend more time in the US. However, while Latino day laborers report low frequency of drinking episodes, they drink on average seven or more drinks per drinking occasion. Likewise, while drug use is relatively infrequent, a significant number of day laborers report sharing needles when using drugs intravenously. In brief, this vulnerable group may engage in risky drinking episodes and drug practices that may subsequently place them at risk for a host of negative health consequences. The aims of the study are to (1) examine the prevalence rates of alcohol and drug use among Latino day laborers and (2) test the effects of risk and protective factors specific to this population. Risk factors included stressors previously identified to be prevalent among this population such as job instability, difficulty communicating in English, and worrying about their families. Protective factors included perceived social support by their families, friends, and other day laborers. Data were obtained from a survey directed by Dr. Lara Ray as part of a larger community participatory study. The survey was conducted between May and July 2011. A total of 90 male Latino day laborers from Los Angeles and Central America were recruited from the Instituto de Educación Popular del Sur de California, a community-based organization that operates job centers in Los Angeles. Assessments included lifetime number of years of alcohol and drug use as well as frequency of alcohol and drug use in the past month. The Migrant Stress Inventory was used to measure stress due to job instability, difficulty communicating in English, and worry about family. Social support was assessed using the Multidimensional Social Support Scale. The interplay between these risk and protective factors will be examined using a structural equation model. Results from this study will begin to address a critical gap in the literature regarding alcohol and drug use patterns among Latino day laborers. Additionally, the study will begin to identify risk and protective factors particular to this vulnerable community and findings will inform the adaptation of evidence-based treatments for alcohol and drug use aimed at this underserved population.

82. Future Time Perspective and Use of Alcohol, Tobacco and Other Drugs among Adolescents in Bogota, Colombia

Ana Maria del Rio Gonzalez, M.S., Felisa Gonzalez; and Maria Cecilia Zea, Ph.D., The George Washington University

Future Time Perspective (FTP) can be defined as a tendency to focus on, and to have positive attitudes towards, the future. Previous research has found FTP to be associated with increased subjective well-being, higher academic achievement, and lower involvement in risk-taking behaviors among youth. The goal of this study was to assess the relationship between FTP and the use of Alcohol, Tobacco and Other Drugs (ATOD) in a sample of adolescents in Bogota, Colombia. The specific hypotheses tested were (1) FTP will be higher among those who have never used ATOD as compared to those who have and (2) among those who have used ATOD, FTP will be positively associated with age at first use. Participants were 437 low SES high-school students (209 females and 228 males) between the ages of 14 and 18 (Mean= 15.31). Two measures were used: 1) A 21-item FTP questionnaire, developed specifically for this study (Cronbach’s alpha= 0.86). Participants were asked to indicate their level of agreement with each item, using a four-point scale (1=completely disagree, 4=completely agree). Responses were averaged to obtain an overall FTP score; 2) A self-report measure of alcohol (with and without becoming intoxicated), cigarettes, marihuana and other drugs use ever. For those reporting having ever used any of these substances, age at first use was also asked. Participants showed a high FTP (Mean= 3.25, min= 1.33, max= 4.0). FTP was higher among females (Mean= 3.3) than among males (Mean=3.2; t=4.35=2.52, p= 0.012). Alcohol consumption was highly prevalent in this sample, with 89% reporting having drunk alcohol (without becoming intoxicated) at least once in their life and 50% reporting at least one episode of intoxication. Use of cigarettes was reported by 53% of the participants. Illegal drug use was not as frequent in this sample, with only 6.4% of the participants reporting having smoked marihuana and 4.6% reporting other drug use. Mean age at first use ranged from 13.0 years old for first time alcohol use without becoming intoxicated (Min= 4.0; Max= 17.0) to 14.7 years old for use of other drugs (Min= 12.0, Max= 18.0). In partial support of the first hypothesis, t-test results revealed that FTP was significantly higher among those who had never been intoxicated and those who had never used marihuana, compared to those who had engaged in these behaviors at least once in their life. The second hypothesis was not supported, as no correlation was found between FTP score and age at first use of any substance. FTP was found to be significantly higher among adolescents who abstained from excessive alcohol consumption and marihuana use, but no differences in FTP were found between users and non-users of tobacco and other drugs. Thus, FTP may function as a protective factor against some, but not all, substance use. Giving the cross-sectional nature of the study, the directionality of the relationship between FTP and ATOD was not evaluated. Future longitudinal research in this area could elucidate the issue of causality in this association.
The Influence of Parent Cultural Values and Practices on Hispanic Adolescent Drug Use Intentions

Meghan M. Garvey, B.S.; and Felipe G. Castro, Ph.D., M.S.W., Arizona State University and University of Texas, El Paso

Recent studies have examined the influence of parent's level of acculturation on adolescent substance use to understand how cultural processes may be protective or place adolescents at risk. However, there has been great variability in the way the parent's level of acculturation was assessed. For example, some studies have relied on a measure of linguistic acculturation or place of birth in determining level of acculturation. These studies have contributed to the literature in establishing a connection between parental acculturation level or cultural values and adolescent substance use, however, it remains unclear how parents' cultural values are transmitted to the adolescent and what role they may serve in reducing risk for substance use. The aim of this study was to elucidate the process by which parent's cultural values are communicated to the adolescent and serve to protect against substance use involvement. It was hypothesized that the effects of parent’s traditional cultural values on adolescent substance use intentions would be mediated by family cohesion, parental expectations, and parental injunctive norms.

The sample consisted of 210 adolescents (49.3% female; M age = 12.4 years, SD = 0.54) and their primary caregivers (81.3% female; M age = 38.5 years, SD = 6.9) drawn from a larger study examining a family-based substance abuse prevention program for Hispanic youth (Parra et al., 2011). In the fall of the school year, a pre-intervention battery of assessments was administered to both parents and their adolescents. Parents reported on traditional cultural values, family bonding, and expectations for their child. Adolescents reported perceived reaction from parents if they used drugs (parental injunctive norms) and their intentions to use drugs in the future. To test the study hypotheses, we estimated a path model to examine the relationships of family traditionalism, family cohesion, parental expectations, and perceived parental reaction to drug use (parental injunctive norms). The model analysis provided the following overall fit indices: R2 MLR(4) = 4.20, p = 0.38, CFI = .97, RMSEA = .04 and SRMR = .04. Results indicate that the direct effect of parent's traditional cultural values on family cohesion was significant ($R^2 = .38, p < 01$), supporting the hypothesis that traditional values are related to higher levels of emotional closeness and dependability among families. The direct effect of parental injunctive norms on adolescent drug use intentions was also significant ($R^2 = -.31, p < 01$). This indicates that adolescents who perceived that their parents would disapprove of their use of substances were less likely to have plans to use those substances in the future. None of the hypothesized mediated effects were significant. As hypothesized, results suggest that parents' traditional values are related to higher levels of emotional closeness and dependability among families in our study. However, family closeness did not mediate the relationship between traditional values and adolescents’ intentions to use substances in the future.

The study was carried out with 362 children from 2nd to 5th grades of elementary schools from Mexico City. Of the participating children, 188 were part of the experimental group (49.5% boys and 50.5% girls) and 174 of them were part of the control group (49.4% boys and 50.6% girls). We also assessed parents before and after the intervention. The overall results showed that physical abuse in the past month, physical abuse in the last year and emotional abuse by the fathers to the children decreased significantly at the end of the intervention program. Analyzing this data by sex, at the beginning of the intervention program it was found that boys reported more physical abuse by the mother, by the father the most reported were severe physical and emotional abuse. In the case of girls, it is the main results with the boys in all types of abuse but with parents they never said that at the end of the intervention, mothers were the ones who declined further aggressive foster practices unlike fathers. We observed that the development of social skills in children besides giving them tools to protect themselves against problematic behaviors, it also helps them to establish a better relationship with their parents, and this results for parents to reduce aggressive foster practices.
86. Differences in the Change of Prevalence of Smoking and Daily Smoking between Hispanics and Non-Hispanics: A National Study

Mamouni Okuda Benavides, M.D., Columbia University College of Physicians and Surgeons; Roberto Secades, Ph.D.; and Shang-Min Liu, M.S., New York State Psychiatric Institute; Carlos Blanco, M.D., Ph.D., Columbia University College of Physicians and Surgeons

Tobacco smoking is the leading preventable cause of premature death in the US. Over the last few years, the prevalence of smoking in the US population has substantially decreased. However, whether decreases in prevalence of smoking and daily smoking (a proxy for nicotine dependence) have been similar between Hispanics and non-Hispanic whites is unknown. Study subjects consisted of Hispanics and non-Hispanic Whites living in the US from the National Longitudinal Alcohol Epidemiologic Survey (1991) and Wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions (2005). We used odds ratios to examine cross-sectional differences in prevalence between Hispanics and non-Hispanic whites in 1991 and 2004, and interaction terms in logistic regression analysis to examine whether changes in prevalence between those two periods differed by ethnicity. The prevalence of smoking in Hispanics and non-Hispanic whites in 1991 was 24.1% and 30.3%, respectively (OR=0.73). In 2005, the prevalences were 16.3% and 25.7% (OR=5.6). The prevalence of daily smoking in Hispanics and non-Hispanic whites in 1991 was 17.0% and 27.0% (OR=0.55). In 2004, the prevalences were 11.7% and 19.7% (OR=5.4). The prevalence of daily smoking among smoking Hispanics and non-Hispanic whites in 1991 was 70.7% and 89.2% (OR=0.29). In 2004, the prevalences were 71.9% and 76.8% (OR=7.7) (p for all ORs <0.001). Despite larger decreases over time in the prevalence of smoking among Hispanics than among non-Hispanic whites, the trends are opposite for the prevalence of daily smoking among smokers. Taken together, these results portend growing difficulties in decreasing the prevalence of nicotine dependence among Hispanics.

87. Monthly Incidence and Drug Use Related Factors in Students from 7th to 12th Grade from the State of Mexico

Natania Oliva Robles; Jorge Ameth Villatoro Velázquez, BSc; Filiberto Itzcóati Gaytán Flores; and Clara Fleiz Bautista, PhD, National Institute of Psychiatry Mexico

Drug use is a complex phenomenon that occurs in different phases. It is known that some people only experience it with others and continue its consumption. Understanding the mechanisms that facilitate or not this conduct is helpful to establish preventive interventions. Objective: To describe personal and interpersonal factors related with the use of drugs among students from 7th to 12th grades. The study was conducted with a random sample of 10,275 students of 7th to 12th grades from the State of Mexico, which is located in the center of the country that along with several municipalities makes up Mexico City metropolitan area. The sample design was stratified two-stage clustered. Information was obtained through a standardized questionnaire previously validated with indicators that explore different behaviors and drug use (Villatoro, et al., 2010). Stata version 11 was used to analyze data using a multinomial logistic regression, considering the sample design and using the categories of: non users (reference category), regular users and having initiated drug use in the last month. 19.0 of the students were drug users. 1.2% initiated drug use in the last month; 1.1% of women and 1.4% of men. In men, predictors of drug use were having a job, being impulsive, not planning ahead, low perceived risk of illegal drugs use, drug availability in the environment, failure to socially adjust, having friends with antisocial behavior, drug use by the best friend or close family and friends tolerance to drug use. For women, predictors of drug use were having a medium-low socioeconomic status and the use of drugs by the best friend. In women, drug use predictors were having a medium socioeconomic status, the presence of sexual abuse, being impulsive, low personal satisfaction, low perceived risk of using illegal drugs and drug availability in their environment, the presence of negative parental monitoring, having friends with antisocial behavior, drug use by best friend and close family and friends tolerance to drug use. For men who initiated drug consumption in the last month, significant variables were having drug availability in the environment and the use of drugs by the best friend. Data was consistent for men and women in the fact that it is the presence of friends who use drugs the main predictor for initiating drug consumption. For women, the variable of drug availability is added. For men, drug use is more common in those from middle-low socioeconomic status. There are more factors that facilitate the maintenance of drug consumption, especially those related to risk perception, family and impulsivity (Duan, et. al, 2009). These factors should be considered to establish measures for preventing the initiation of drug use and to discourage the maintenance of drug consumption in this population.

88. The Integrated Dual Disorders Treatment (IDDT) Program, Proyecto Tranquilidad

Gladys N. Pachas, M.D., Massachusetts General Hospital, and Harvard Medical School; Sara Carlini, BA, Massachusetts General Hospital; Rene Milet, J.D., Latin American Health Institute, Boston, MA; A. Eden Evins, M.D., M.P.H., Massachusetts General Hospital, and Harvard Medical School; Melissa C. Maravic, Ph.D., M.P.H., Latin American Health Institute, Boston, MA

Although the prevalence of mental disorders in racial and ethnic minorities in the US is similar to that of Caucasians, minorities have less access to mental health services and are known to be less likely to receive those services. Hispanic youth experience higher rates of anxiety disorders, depression, suicide attempts, drug use and delinquency than do Caucasian youth; Hispanic males use alcohol at the same rates of Caucasians, yet Hispanic men have higher rates of problem drug and alcohol use than African-Americans or Caucasians, and are less likely than Caucasians to get treatment. Language and cultural differences may be among the highest barriers to treatment. IDDT is a program provided by the Latin American Health Institute in Brockton, MA to Hispanic and Portuguese-speaking ethniclinguistic minorities who have co-occurring substance use and serious mental disorders.

It is designed to deliver comprehensive case management services, and integrated addiction and mental health treatment through a multidisciplinary team. Treatment is focused on the multifaceted needs of the patient and delivered in their native language. The goal is to increase the access to many Spanish, Portuguese and Cape Verdean Creole speaking people who do not traditionally access mental health services.

We analyzed change from intake to the end of six months of program involvement in self-report of depression, anxiety, psychological stress, and concentration difficulties as well as days of alcohol, marijuana and cocaine use with the Addiction Severity Index. Seventy-one participants have entered the program. The retention rate to date is 94%. At this time 45 participants have completed the six month program and were included in this analysis. They were 71% male, 47% Hispanic (of these 86% Puerto Rican), 53% completed less than 12 years of education. From intake to the six-month follow up, participants reported a reduction in the number of days experiencing depression (16.0 (11.3), 9.9 (11.3), p<0.001), and no change in days with significant anxiety (16.4 (12.0), 12.8 (11.2) p=0.1). Of the 17 (38%) of participants who reported alcohol use at intake, 12 (70%) reported reduced use at follow-up. This group reported a 47% decrease in days of alcohol use. In VAS measures (range 1-4) there was no change from intake to follow-up in self-report of psychological stress (2.5(1.2), 2.2(1.1)) or perception of problems caused by substance use (2.2(1.1), 1.8(1.0)). Participants who reported reduced alcohol use, also reported reduced number of days experiencing depression (16.08 (12.6), 7.42 (7.5), p=0.007), anxiety (16.75 (14.4), 10 (10.2), p=0.067) and concentration difficulties (15.08 (14.1), 4.08 (7.3), p=0.009). Five 11% were employed at intake, and 11 (24%) were employed at follow up. In a group of ethnic and linguistic minority adults, involvement in a multidisciplinary treatment and case management program with outreach and attached social services in their native language retention rates are remarkably high, and participation was associated with reduced depressive symptoms, reduced alcohol use and, among those who reduced alcohol use, reduced depression, anxiety, and difficulty concentrating.

Pathways Toward Health Equities in Hispanic Populations
90. Tobacco Smoking and Environmental Tobacco Smoke During Pregnancy in the Mexican Population
Clara Rauff, MSc; Maria Elena Medina-Mora, PhD; Jorge Villatoro, BSc; Midiam Moreno, BSc. National Institute of Psychiatry Mexico
Tobacco smoking during pregnancy leads to several health problems not only to the woman but to the offspring as well. In the US and Europe adverse sociodemographic characteristics, such low education, lower family income, alcohol drinking, and late onset of prenatal care have been reported as predictors smoking status and ETS exposure during pregnancy. However, little is known about the characteristics associated with smoking while pregnant in developing countries. Objective: We aim to find the social factors related with tobacco smoking during pregnancy and whether those characteristics among women are at an increased risk of environmental tobacco smoke (ETS) exposure. Method. We analyzed weighted data from the National Addiction Survey 2008 of respondents who had ever been pregnant (n= 25,477,275). The sample was a random, multistage, probabilistic study across Mexican general population aged between 12 to 65 years. The analysis included age, education, family income, type of population, and partner’s smoking status during pregnancy. Adjusted odds ratios (OR) were estimated using logistic regression models adjusted for design effects. Results. Most of women (65%) decreased the consumption; 11% continued the same smoking pattern, and 5% reported to have increased the use. A significant risk of smoking during pregnancy was found among those who lived in urban rather than urban areas (OR= 4.3). Being a smoker was the most significant predicting variable for ETS exposure (OR= 7.3; 52% of the sample) compared to the youngest women, older cohorts (aged 26-34 and 35-65) were more likely to report passive smoking (OR= 1.5 and 1.5 respectively). As in self consumption, living in cities predicted a smoker partner (OR= 2.2). Though not significant, there is a trend in increased risk for both smoking and ETS exposure among women with higher income. Conclusions. Since most of the smokers decreased their consumption during pregnancy, there is already knowledge about the harm it may cause to the child’s health. However, there is a need of more prevention and treatment programs that target the awareness on the importance of stopping, and not only decreasing, the tobacco intake and to prevent involuntary exposure. Unlike other countries, in Mexico smoking during pregnancy is a behavior unrelated to education or income, yet there is a tendency in higher income groups to smoke more. Pregnancy is a time of motivation to begin cessation efforts in women and by targeting self-consumption, ETS exposure will be also targeted since the main predictor for the latter was smoking during pregnancy.

91. Gender Differences in the Direct and Indirect Effects of Multi-Level Risk and Protective Factors on Trajectories of Violence among Hispanic Adolescents
Jennifer M. Reingle, M.S.; Wesley G. Jennings, Ph.D.; and Mildred Maldonado-Molina, Ph.D. University of Florida
Race/ethnic and gender disparities are present in violent offending, as evidence suggests that Hispanics are at greater risk for violence compared to Whites. There is considerable debate in the literature as to whether the risk and protective factors for violence differ by gender group. To address this gap, the purpose of this study is to estimate trajectories of serious violent behavior and evaluate the direct and indirect effect of multilevel risk and protective factors among Hispanics, stratified by gender subgroups. Participants included a nationally representative sample of 4,786 Hispanic adolescents surveyed as a part of the National Longitudinal Study of Adolescent Health (Add Health). Trajectories of violence were estimated using latent group-based trajectory modeling. Multinomial logistic regression procedures were used to evaluate the effect of multi-level risk and protective factors in stages (e.g., community-level, parent- and peer-level, and individual-level) to understand the predictors of membership in high-violent trajectory groups. Mediation analyses were conducted to further evaluate the direct and indirect effect of community-, parental- and peer-level variables on violent trajectories. Three groups of violence trajectories were identified for both males and females: 1) Non-Violent (59.6% of males, 78.7% of females); 2) Escalators (15.1% of males, 10.9% of females); and 3) Desistors (25.2% of males, 10.3% of females). Among Hispanic males, depression significantly predicted escalation (OR = 1.38; 95% CI 1.24-4.62), and marijuana use marginally predicted both desistance (2.07; 95% CI 0.87-4.93) and escalation (OR = 2.13; 95% CI 1.10-4.44) The effect of peer alcohol use was mediated largely by depression (t = 2.32; SE = 0.08), group fighting, (t = 2.20; SE = 0.20), and violence at baseline (t = 2.17; SE = 0.21). Peer marijuana use was mediated by individual-level marijuana use (t = 2.26; SE = 0.10), depression (t = 2.12; SE = 0.23), and violence at baseline (t = 2.21; SE = 0.18). Among Hispanic females, residing in an urban neighborhood was protective from escalation (OR = 0.29; 95% CI 0.13-0.68), and less consumption was a risk factor for escalators (OR = 7.04; 95% CI 1.50-32.98). No violence items, including baseline violence and group fighting, significantly predicted violence among Hispanic females. Residence in an urban neighborhood (t = 2.46; SE = 0.03), peer alcohol use (t = 2.65; SE = 0.12), and peer marijuana use (t = 2.38; SE = 0.15) were all significantly mediated by individual-level alcohol use. Three groups of violent trajectories were identified for Hispanic males and females: non-violent, escalators, and desistors. The patterns of violence were similar across gender groups, but more males than females were assigned to violent trajectory groups. Depression and marijuana use were significant predictors of escalation (the highest risk violent group) among males only. Contextual variables (urban neighborhood residence, peer alcohol and peer marijuana use, and parental alcohol use) appear to have indirect effects on violent trajectory membership. Relatively few variables predicted violent among Hispanic females. Future research should identify the risk and protective factors among Hispanic females.

89. Nicotinic Receptors in the Medial Habenula/Interpeduncular Axis Play a Role in Alcohol Withdrawal
Erika Perez; and Mariella De Biasi, Ph.D., Baylor College of Medicine
Alcohol is one of the most prevalent addictive substances in the world. Cessation from alcohol and nicotine produces a large number of overlapping withdrawal signs and symptoms. For example, increases in anxiety a commonly reported withdrawal symptom for both alcohol and nicotine, and has been shown to play an important role in relapse for both drugs. Evidence suggests that alcohol interacts directly with the nicotinic cholinergic system. Gene target studies have recently suggested a strong correlation between the α5, β4 γ2 gene cluster and both alcohol and nicotine dependence. Since our lab has shown that the α5 and β4 nAChR subunits play an important role in nicotine withdrawal, we predict that the nicotinic receptor subunits are also involved in alcohol withdrawal. Both these subunit have overlapping expression in the medial habenula (MHb) and the interpeduncular nucleus (IPN), which our lab has previously shown to play a role in nicotine withdrawal. We hypothesize that the MHb/IPN axis plays a role regulating withdrawal induced by behaviors. Wild type, α5 null and β4 null mice received a daily alcohol injection over the course of 9 days. These mice were then tested in the open field arena and the marble burying test to investigate the effects of the α5 and β4 null mutation on ethanol withdrawal induced anxiety-like and compulsive-like behavior. In addition, we examined somatic signs of withdrawal under spontaneous conditions. To examine the role of the MHb/IPN axis wild type mice received a microinjection of the non-selective nicotinic receptor antagonist, mecamylamine, into the MHb or IPN 4 hrs after the last ethanol injection. Somatic signs of withdrawal were then measured for 20. Unlike their wild type littermates, α5 null and β4 null mice do not exhibit increases in anxiety-like behavior in the open field arena or increases in compulsive-like behavior in the marble burying test during alcohol withdrawal. In addition, increases in somatic signs of withdrawal are not observed in α5 null or the β4 null mice. Mecamylamine microinjections into the MHb or IPN are able to precipitate increases in somatic signs of withdrawal only in alcohol treated mice. Overall our data suggests that α5- and β4-containing nAChRs play a role in the manifestation of affective and somatic signs during ethanol withdrawal. Our data also highlight the role of the MHb/IPN as an important circuit for alcohol withdrawal. Overall these results highlight possible drug targets for alcohol cessation therapies.
92. Prevalence of Sexual Partner Concurrency among High Risk Female Sex Workers and their Intimate Male Partners in Tijuana and Ciudad Juarez, Mexico

Angela M. Robertson, M.P.H., University of California San Diego; Jennifer Svartvansen, M.P.H., University of South Florida; Gudelia Rangel, Ph.D., El Colegio de la Frontera Norte, Mexico; Hugo Staines, M.D., Universidad Autónoma de Ciudad Juárez, Mexico; Victoria D. Ojeda, Ph.D.; and Steffanie A. Strathdee, Ph.D., University of California San Diego

Prevalence of HIV and sexually transmitted infections (STIs) is increasing among female sex workers (FSWs) in Mexico’s Northern border region through unprotected sex with commercial partners (clients) and non-commercial, intimate male partners (IMPs). In Tijuana and Ciudad Juarez, two large urban centers that are known for their drug use, sexual concurrency is of considerable concern because of the potential for drug transmission. Concurrency increases the risk of HIV and other STIs among FSWs and their male partners. Our objective was to assess concurrency among FSWs and IMPs in Tijuana and Ciudad Juarez. In January 2010, outreach workers recruited FSWs in locations where sex work and drug use visibly occurred. Eligible FSWs were ≥18 years old; ever used heroin, cocaine, crack, or meth; recently exchanged sex (past month); had an IMP for 6 months and recently had sex with that IMP (past month); IMPS were ≥18 years old and in a non-commercial relationship with an eligible FSW. Additional screening measures helped verify couple status. Interviewer-administered baseline surveys covered sociodemographics, intimate relationship characteristics, sexual and drug-related risk behaviors for FSWs/STIs, and questions about up to five “other” (concurrent) steady partnerships in the past year. We defined annual cumulative prevalence of concurrency as the fraction of participants reporting any “other” partnerships overlapping with their IMP relationship (i.e., within the past year, the date first sex within a more recent partnership preceded the date of last sex within an earlier partnership). For FSWs, we assessed concurrency as (1) only non-commercial steady partnerships overlapping with their IMP relationship, and (2) both non-commercial and commercial steady partnerships (regular clients). Among 217 couples (N=434), median age was 34 years (interquartile range [IQR]: 28–41); IMPS were 4 years (IQR: 8–10) older than FSWs. Median relationship duration was 3.1 years (IQR: 1.8–5.3). In the past 6 months, participants used heroin (48.2%), methamphetamine (36.2%), cocaine (25.6%), and crack (14.1%), and 47.5% injected any drugs. Few FWSs (N=13; 6.0%) reported non-commercial steady partnerships overlapping with IMP relationships. When including FSWs’ regular clients, cumulative prevalence of concurrency (past year) was 20.0% (IQR: 11.2–27.8) and was significant (p<0.05); 27.7% in Tijuana (p<0.001) and in Ciudad Juarez, p<0.0001. Concurrency was more prevalent among those who recently used methamphetamine (31.2% vs. 13.7% p<0.0001) and less prevalent among those who used heroin (15.3% vs. 24.4%, p<0.02), crack (6.6% vs. 22.3%, p<0.01), or injected any drugs (14.6% vs. 25.0%, p<0.01). Preliminary findings suggest that concurrency prevalence is higher among FSWs than IMPS in Tijuana than Ciudad Juarez, and among methamphetamine users. Additional analyses will refine concurrency prevalence estimates and use multivariable, multilevel regression models to identify its correlates within high risk dyads of FSWs and IMPS.

93. Ojos que no ven, corazón que no siente: Strategies of Contending with Sex Work within Female Sex Workers’ Relationships with their Non-Commercial Partners in Tijuana, México

Jennifer T. Svartvansen, M.P.H., University of South Florida, and University of California San Diego; Maria Luisa Rolon, Universidad Xochicalco, Mexico; Lawrence A. Palinkas, Universidad de Southern California, and Universidad de California San Diego; Alicia Vera; Angela M. Robertson; and Steffanie A. Strathdee, University of California San Diego

Cross-cultural research has shown that intimate relationships influence each partner’s health and wellbeing, including the risk for acquisition of HIV and other sexually transmitted infections (STIs). To date, relationships between female sex workers (FSWs) and their non-commercial male partners remain largely unexamined, particularly in terms of how these couples discuss and manage sex work while maintaining an intimate relationship. We explored relationship dynamics surrounding the topic of sex work among FSWs and their intimate male partners in Tijuana, Mexico, with an interest in understanding how partner attitudes and communication may shape HIV/STI risk. Proyecto Parejas is an ongoing observational study of the social context and epidemiology of HIV, STIs, and high risk behaviors among FSWs and their non-commercial partners in Tijuana and Ciudad Juárez, Mexico. In each city, 100 FSWs and their steady partners underwent a quantitative survey and HIV/STI testing every six months. A sub-sample participated in baseline qualitative interviews. The current analysis employed a grounded theory approach to analyze individual and couple-based semi-structured interviews with 32 couples in Tijuana (total interview n=93) for themes related to attitudes and communication styles surrounding the female partner’s sex work. Male attitudes toward their partners’ sex work tended to fall into partially overlapping categories of acceptance, denial, and ignorance. For many male partners, acceptance of sex work, but most were reluctant to ask their partner about her sex work and some felt jealous of her client relationships. Women overwhelmingly viewed their interactions with clients solely in financial terms, and tended not to share details about their work life with their partners to prevent hurt feelings and discomfort. As such, couples typically avoided discussion altogether, spoke in euphemisms, or lied about sex work. While these strategies appear to help partners cope emotionally and mitigate potential conflict within the relationship, taking an “eyes that don’t see, heart that doesn’t feel” approach may exacerbate physical risks and HIV/STI acquisition. The challenges of designing appropriate interventions for FSWs and their intimate partners include adopting approaches that enhance communication about risk behaviors and HIV/STI prevention between partners in ways that minimize emotional tension and strengthen partner bonds.

94. Drug Scene Familiarity and Exposure to Gang Violence among Residents in a Small Community in Baja California, Mexico

Tyson Volkmann, MPH; Tyson Volkmann, Miguel Angel Fraga, Stephanie K. Brodine, Esmeralda Iniguez-Stevens, Richard S. Garfinkel, Division of Global Public Health, University of California, San Diego

We examined drug scene familiarity and exposure to gang violence among residents of a small, migrant community in Baja California, Mexico. In October 2010, 169 community members in a small, non-border community in Northern Baja California, Mexico underwent an interviewer-administered survey. Proxy measures for exposure to gang violence (e.g., “Have you or someone you know ever been hurt by gang violence?” and drug scene familiarity (e.g., “Do you have a friend who uses illegal drugs?”) were created. Logistic regression identified correlates of being exposed to gang violence in the community. Of 169 participants, 20% were exposed to gang violence. A majority (78%) were exposed to violence in the past year. The median age was 27 years; 42% were ever hurt or knew someone hurt by a member of a gang; 24% reported having a friend who used illegal drugs. Factors independently associated with being exposed to gang violence included being younger (AOR=1.04 per 5-year increase; 95% CI=0.68–0.98), living in the community longer (AOR=1.54 per 5-year increase; 95% CI=1.15–2.10), higher educational attainment (AOR=1.67 per 5-year increase; 95% CI=1.04–2.76), having a friend who used illegal drugs (AOR=3.87; 95% CI=2.55–5.85), and being in a more recent partnership (AOR=2.39; 95% CI=1.04–5.51). More than 40% of participants reported being hurt or knowing someone who had been hurt by gang violence, among whom community familiarity of the drug scene was common, suggesting a close relationship between drugs and gang violence in the community. In light of ongoing drug-related violence in Mexico, prospective studies to monitor trends in gang violence and drug-use characteristics could inform drug-use and gang prevention interventions and reduce drug-related harms in non-border communities.
95. Prevalence of Abuse and Depressive Symptoms in a Sample of Injection Drug Using Female Sex Workers in Two Mexico-U.S. Border Cities
Monica D. Ulibarri, Ph.D.; and Sarah P. Hiller, M.A., University of California, San Diego; Remedios Lozada, M.D., Pro-COMUSIDA, Tijuana; Gudelia Rangel, Ph.D., El Colegio de la Frontera Norte, Tijuana; Jamila K. Stockman, Ph.D., M.P.H.; Jay G. Silverman, Ph.D.; and Victoria D. Ojeda, Ph.D., M.P.H., University of California, San Diego

Prevalence of abuse (physical and sexual) in childhood and adulthood has been documented among female sex workers (FSWs) worldwide. However, there is little research on the context and severity of abuse in relation to depression among highly vulnerable populations such as injection drug using FSWs(FSW-IDUs) along the Mexico-U.S. border. This study examined the prevalence and characteristics of physical and sexual abuse experiences among FSW-IDUs in two Mexico-U.S. border cities, and the relationship between history of abuse and current symptoms of depression. This mixed method study utilized quantitative data from baseline interviews of 624 FSW-IDUs enrolled in a behavioral intervention in Tijuana and Ciudad Juarez, Mexico designed to reduce high-risk sexual and injection behaviors. Descriptive statistics and demographic comparisons of depression, age of first abusive event, severity of abuse, perpetrator, disclosure, and perceived support if the abuse was disclosed. Univariate and multivariate linear regressions were conducted to identify correlates of depression. Qualitative data were obtained from in-depth interviews conducted with a subset of 47 FSW-IDUs from the Tijuana site only; abuse and mental health were emergent topics. For the total sample, mean age, years of education, and age when first began regularly working as a FSW were 33.7, 7.1, and 21.2 years, respectively, Overall, 50% (n = 313) of the women ever experienced forced/coerced sexual abuse, and 49% (n = 304) had ever been physically abused; 33% (n = 207) reported forced sex before age 18, 24% (n = 151) reported physical abuse before age 18. Male family members (e.g., fathers, uncles, etc.) were the most common perpetrators of forced sex before age 18, and boyfriends/spouses were the most common perpetrators of physical abuse before age 18 and in more recent adulthood experiences. These results were corroborated by reports of abuse experiences in the qualitative data. Disclosure rates of first sexual and physical abuse experiences were 51% and 53%, respectively. Both quantitative and qualitative data indicated that mothers were the most common people to whom participants disclosed their abuse experiences, however, in the in-depth interviews, women reported that action against perpetrators was rarely taken. Regarding client-perpetrated abuse, 20% (n = 123) reported ever being physically abused by clients, and 22% (n = 139) reported ever experiencing forced sex by clients. The mean depression score for the total sample (measured by a 10-item CES-D Short Form) was 16.1 (SD = 7.0), with scores at follow-up assessment 0, 3, and 6 months after treatment completion. We expect that adolescents in the accommodated treatment will have better family environment and the RCT data is still being collected. Using pilot data, between group differences will be examined at follow up assessments 0, 3, 6 months after treatment completion. We expect that adolescents in the accommodated treatment will have better family environment scores at follow-up. Many researchers have argued for the inclusion of cultural variables into substance abuse treatment. Additional research addressing how cultural factors may influence violence victimization, drug use, and HIV risks among FSW-IDUs may be beneficial to future HIV prevention interventions targeting this high risk population.

96. Understanding the Role of Cultural Accommodations on Family Environment in a Group-Based Substance Abuse Treatment for Latino Adolescents
Alberto Varela, B.S.; and Jason Burrow-Sanchez, Ph.D., University of Utah

Throughout the substance abuse treatment literature, researchers proposed that cultural variables should be integrated into treatments for ethnic minorities. Unfortunately, however, the literature is limited on actual examples of how to accomplish this task. The Validating Interventions for Diverse Adolescents (VIDA) project is a five-year federally funded research study comprised of three components: conducting focus groups, a pilot study, and a randomized clinical trial (RCT). The major aim of the VIDA project is to culturally accommodate and empirically test a group-based substance abuse treatment for Latino adolescents. Information gathered from both the focus groups and pilot study has been incorporated to help guide this process. The accommodation model consists of three parts: compiling different sources of sources of information (including focus groups, informed expert opinion, literature, and team discussion), accommodation practices (including treatment content and delivery), and empirical testing (pilot study and RCT). Hypothesis 1: Since one of the primary goals of the accommodated treatment is to engage the parents in the intervention, it is expected that adolescents who are part of the accommodated treatment will report a better family environment at follow-up. Skills taught in the substance abuse treatment (e.g. problem solving, decision making, communication, managing anger and mood, and so forth) are likely to enhance others areas of the adolescents’ lives beyond the realm of substance use (e.g. family environment). Thirty-five Latino adolescents who were recruited primarily from juvenile justice probation officers were randomized to one of two treatment conditions (18 = standard and 17 = accommodated). The results presented here are based on 27 participants who completed treatment (13 = standard and 14 = accommodated) and pre/post assessments. The culturally accommodated treatment included changes made to both the content and delivery of the intervention. The treatment was delivered in a group format with one facilitator and 8-10 adolescents. Group sessions lasted 1½ hours and were conducted over 12 weeks. Assessments were completed pre-treatment, post-treatment, post-treatment, post-treatment, and a 3-month follow-up assessment in September 2010, and the RCT data is still being collected. Using pilot data, between group differences will be examined at follow up assessments 0, 3, months after treatment completion. We expect that adolescents in the accommodated treatment will have better family environment scores at follow-up. Many researchers have argued for the inclusion of cultural variables into substance abuse treatment. The VIDA project provides an empirical model for culturally accommodating substance abuse treatment for Latino adolescents. We expect that adolescents in the accommodated treatment will have comparable outcomes (e.g. levels of substance use) as adolescents in the standard treatment. While these results highlight the need to make treatment more culturally congruent, we must also consider what other effects this particular treatment intervention has on adolescent functioning (e.g. family environment) that would further this argument. Family environment may be related to adolescents substance use and use of pilot data will be helpful in beginning to understand this relationship.

97. Who are the Adolescents Who Being at Risk do not Use Drugs?
Jorge Ameth Villatoro Velázquez, BSc; Maria Elena Medina-Mora, PhD; Midiam Moreno Lopez, Graduate Student; Natania Olivia Robles; Tania Gabriela Gonzalez Ortega; and Miguel Angel López Brambila, National Institute of Psychiatry Mexico

Much of the current knowledge shows the related factors that facilitate drug use, however, the fact that even in the presence of these factors, some of the adolescents do not use drugs, is less known. Interaction between risk and protective factors is not a simple process (Rutter, 2006), their study has been constantly changing as the scenarios and contextual variables change. Therefore, this study is aimed to identify the characteristics of adolescents that even in risk situations do not use drugs. The study is a probabilistic survey in school population which was representative of Mexico City. The final sample was 22,980 students, and it was conducted in late 2009. The information was obtained through standardized questionnaire previously validated containing indicators that explore different aspects of drug use and related factors. (Villatoro, et. al., 2009). For data analysis manova and x2 were used to compare 3 groups: not consumers without risk factors, not consumers with risk factors (drug availability, low risk perception, high social tolerance and opportunity to use drugs), and the third group were drug users. Data shows that non-consumption group at risk did not differ with drug user group in terms of communication, self esteem, and social support, median and distance to one percentage of relatives with drinking problems and parents fighting at home, better self-esteem, social adjustment as well as lower rates of physical abuse, severe physical abuse, sexual abuse, emotional abuse and neglect. They also showed higher satisfaction with their quality of life, less impulsivity and they have more pro-social friends. While the non-user group without risk provided better rates in the indicators,
it is important to point out, that parenting and neglect indicators are almost the same in these two groups. Data shows how a positive parental relationship and the presence of parents or any adult who provides constant supervision and support are relevant factors in preventing drug use. To have the support from public and social policies that facilitate such tasks and provide education to parents and parents to be, in how to raise and give their children effective support, are elements that will contribute to reduce drug addiction and its associated problems.

98. Covariates of Sexual Attitudes among Teens: A Step Toward Preventing Teen Pregnancy

Martha I. Zapata Roblyer, M.A., and Ronald B. Cox, Ph.D., Oklahoma State University

According to the CDC, youth sexual behavior has increased in recent years while healthy sexual behaviors among teens appear to be decreasing. The increasing rates of intercourse and decreasing use of contraception are crucial risk factors for unintended pregnancies and the transmission of STDs among youth. Youth pregnancy often results in numerous negative outcomes school dropout, substance use, and increased risk of poverty.

Youth attitudes toward sex have been shown to be a strong predictor of subsequent sexual behavior. Still, few studies have explored youth attitudes toward sexual relations as an outcome. Moreover, we found no studies that looked at how the effects of level-one variables (e.g., parenting, peer influences, family structure and media exposure) on youth attitudes toward sex are associated with school-level variable (e.g., level of perceived norms). The present study employs a multi-level logistic regression to model the effects of several covariates on the probability of having a favorable attitude toward teen sexual behavior among 7th grade students. Data are from the first wave of the Pathways to Student Success project (PaSSS), a five-year longitudinal study initiated in of 2009. The population of 7th grade students present the day of data collection from 12 middle schools in an urban school district of Oklahoma was surveyed using a self-report standardized instrument (N=1,694). Mean age was 13.1 and 50.2% were female. ethnically, 39% reported being of Hispanic descent, 29% African American, 20% Caucasian, and other 16%. Relationships between covariates and attitudes toward sexual relations among youth were estimated using a multi-level SEM. Preliminary results showed that compared to White youth, Black youth were 50% more likely, other races were 35% more likely, and Hispanics were no more likely to endorse that it was OK for youth their age to engage in sexual relations. Gender did not influence attitudes, but family structure, positive parenting, seeing pregnancy as common in their school, and time watching TV on a school day, and acculturation levels among Hispanic youth were strongly associated with attitudes toward sex. Both individual and contextual (e.g., familial, peers, and community) variables are strongly associated with teen attitudes toward sexual behaviors among younger adolescents. Preliminary results identify factors to target that may help delay sexual debut and foster resilience among youth. Preliminary findings suggest the importance of modeling antecedents to sexual initiation among younger adolescents in an effort to better inform prevention strategies. Next steps include modeling school-level covariates to test for cross-level associations.

NEUROSCIENCE

99. High Androstenedione is Associated with Spatial Reference and Working Memory Impairment in Transitionally and Surgically Menopausal Middle-Aged Rats

Jazmin I. Acosta, Ph.D.; Sarah Mennenga, B.S.; Bryan Camp, B.S.; Stephanie Villa; Julia Gerson, J.E.; and Heather Bimonte-Nelson, Ph.D., Arizona State University

After natural menopause, the androgen androstenedione becomes a primary hormone secreted by the residual follicle deplete ovaries. Recently we found a positive correlation between higher androstenedione serum levels and spatial working memory errors in rats that have undergone experimentally-induced ovarian follicular depletion via 4-vinylcyclohexene diepoxide (VCD). In a follow-up study, we examined the hypothesis that androstenedione impairs memory by evaluating the cognitive effects of androstenedione administration in a rodent model. Middle-aged ovarietomized (OVX) rats received vehicle or one of two doses of androstenedione, with goal doses resulting in blood levels seen in follicular deplete, ovary-intact animals from our prior study. Rats were tested on a spatial working and reference memory using the water radial arm maze (WRAM). Androstenedione at the highest dose impaired WRAM reference memory performance during learning as well as the ability to handle multiple items of spatial working memory information (WRAM) as memory demand was elevated. Serum androstenedione levels were comparable to the higher serum levels we have shown previously to correlate with impaired working memory and this correlation was replicated. These findings suggest that androstenedione, a hormone produced by the follicle deplete ovary, is detrimental to spatial learning, reference memory, and working memory.

100. Lasting Changes in Extracellular Signal-Regulated Kinase Signaling within the Ventral Tegmental Area as a Consequence of Juvenile Exposure to Combined Methylphenidate and Fluoxetine in C57BL/6J Mice

Lyonna F. Aicantara; Sergio D. Iliguez, M.A.; Brandon L. Warren, M.A.; Florida State University; and Katherine N. Wright, Florida State University; Torry S. Dennis; Samara M. Bobzean; and Linda I. Perrotti, Ph.D., The University of Texas, Arlington; Carlos A. Bolaños-Guzmán, Ph.D., Florida State University

Combined methylphenidate (Ritalin; MPH) and fluoxetine (Prozac; FLX) are commonly prescribed for the treatment of co-morbid attention-deficit-hyperactivity disorder and major depressive disorder in pediatric populations. This is surprising given that the long-lasting neurobiological consequences of such drug treatment have not been characterized. In addition, when combined (MPH+FLX), this treatment has been suggested to display pharmacodynamic properties similar to cocaine. In this study separate groups of juvenile C57BL/6J male mice were chronically treated with MPH (2 mg/kg), FLX (2.5 mg/kg), MPH+FLX (2 and 2.5 mg/kg respectively), cocaine (20mg/kg), or saline, twice daily from postnatal days 20-34. Changes in gene expression within the ventral tegmental area, a brain region highly implicated in both drug-reward and mood-related disorders, were then assessed both twenty-four hours and two-months after the end of drug treatment. Using qPCR we measured whether extracellular signal-regulated kinase (ERK)-signaling would be affected by such treatments, given ERK’s role in mediating drug-induced behaviors. At twenty-four hours, our study shows a decrease in expression in ERK across all treatment groups when compared to the control condition. Interestingly, at this time point MPH+FLX treatment increased expression of other transcription factors such as CREB, BDNF, and zif268. We further show that after a two-month drug-free period, MPH+FLX and cocaine treatment increased levels of ERK, CREB, BDNF; cFos, and zif268 in a similar fashion. Overall, these findings suggest that concomitant MPH+FLX and cocaine treatments during juvenile periods result in persistent changes of ERK-signaling within the ventral tegmental area of the midbrain in adulthood.

Tylor Brown BS, Emily Lines BS, Bernard Voller MD, Gayle McCrossin RN, Sherry Vorbach, Camilo Toro MD, Dietrich Haubenberger MD, Mark Hallett MD

Ethanol is known to reduce tremor in patients with essential tremor (ET). Approximately two-thirds of patients report a reduction in tremor intensity after ingestion of ethanol. One way to define ethanol response is to measure tremor amplitude. Tremor amplitude can be measured objectively using computer-based analysis of digitized Archimedes spiral drawings from patients. The aim of this study is to compare subjective reports of ethanol response to an objectively-quantified ethanol response to a standardized oral ethanol challenge. Patients with ET were given a standardized dose of oral ethanol based on total body water, with a goal of achieving 0.05 mg/kg blood ethanol level. Patients were asked to draw Archimedes spirals with both hands, one at a time, with elbows off the table. Spirals were collected on a laptop and data recorded using custom software (Neurolglymphics, www.neurolglyphics.org). Spirals were collected in two baseline time points and every 15 minutes. The two baseline values were averaged and spirals were then collected at 20 minute intervals after alcohol administration for 2 hours. Data for the dominant hand was analyzed and grouped into "responders" and "non-responders" category based on the following criteria. Because tremor amplitude was shown to vary to 30% during the day, "responders" were identified as those patients with a tremor reduction exceeding 35% at the 60 minute time point, which has been shown to be the point of maximal ethanol effect. This objective data was compared with patients' own reports of ethanol response ("response," "no response," or unknown). 24 patients (14 females and 10 males, mean age: 64.8±11 years, mean tremor duration: 31.8±11.9 years) participated in the study. 18 of 24 patients were objective responders (O+) and 6 were non-responders (O-). 17 of 24 patients were subjective responders (S+) and 7 were non-responders (S-). O+ patients had lower mean tremor amplitudes than O- patients at all time points, while S+ patients had lower mean tremor amplitudes than S- at time points 80-100 min. Subjects who were aware of their ethanol response were classified concordantly with the objective classification method. Of those with discordant classifications, two subjects were classified S+/O-, and two subjects classified S+/O+. Of the three patients who did not know their ethanol response, two were classified objective responders and one objective non-responder. There was a high concordance rate between the two classification systems. Discordant results may show room for improvement in the method or may be explained in other ways. S+/O+ patients may not have been aware of their ethanol response due to a lack of experience with ethanol. S+ patients may not have experienced changes in activities other than tremor. S+/O- patients may have difficulty in determining whether they were responding, such as pouring or using keys. Both patients in this category showed >35% improvement in at least one time point other than 60 minutes. In conclusion, this objective method holds promise as a reliable ethanol response indicator in ET patients. It might be useful in future studies to explore the clinical and pathophysiological characteristics of ethanol response.

102. Effects of Escalating Dose of Methamphetamine on c-Fos and FosB Expression in the Nucleus Accumbens

Carolyn Davis, MPH, Tulane University School of Public Health and Tropical Medicine & Louisiana State University Health Sciences Center; Ingrid Tulloch, Ph.D., City University of New York; Subramaniam Jayanthi Ph.D., University of Madras; Jean Lud Cadet, M.D., Columbia University

The abuse of methamphetamine (METH) has increased in popularity in recent decades. METH acts on the reward pathways of the brain and is neurotoxic to dopaminergic and serotonergic terminals. Both acute and chronic METH exposure causes changes in gene expression in several brain regions. Our lab has previously demonstrated that mRNA levels of the immediate early genes (IEGs), c-fos and fosb, are increased in the striatum in acute METH treatment. In contrast, we found that chronic pretreatment caused blunted responses in IEG expression in the same brain structure (McCoy et al., 2010). Because the protein products of both genes are thought to be involved in various models of drug-induced neuroplasticity, the present study was conducted to investigate whether c-FOS and FOSB protein levels were also affected in the nucleus accumbens (NAC), a structure that participates in the brain reward circuitry. Our prediction was that c-FOS and FOS-B protein levels in the NAc might follow similar patterns of changes observed for striatal IEG expression after acute and chronic METH exposure. Rats were given an escalating dose of either METH (0.5-3mg/kg) or saline over two weeks. After a one-day withdrawal, rats then received a challenge dose of either METH (5mg/kg) or saline. This resulted in 3 treatment protocols: escalating saline/challenge saline (SS) as a control, escalating Saline/challenge METH (SM) for acute exposure, and escalating METH/challenge saline (MS) for a chronic exposure. Rats were sacrificed 2 hours after the challenge dose and the NAC was collected and processed for protein analysis. Western blots of each protein were quantitated as a measure of protein expression. Preliminary results suggest that there are increases in both c-FOS and FOSB protein levels in the rat NAc that are given an acute (SS) or chronic (MS) METH challenge dose of METH compared to the saline control group (SS). In chronic treatment, rats treated chronically with METH (MS) had protein levels that were similar to the SS group. The acute effects of METH on IEG expression are similar between the striatum and NAC. However, the chronic effects are quite different since chronic METH caused decreased expression in c-fos and fosb in the striatum. These results will be discussed in terms of their support of the idea that chronic exposure to drugs can cause differential changes in gene and protein expression in various brain regions. These differential changes might be the determinants of the neuroadaptations associated with the addictive process.

103. Chronic Ethanol Consumption Effects on Rat Hippocampus: Oxidative Stress, Neurogenesis and Naltrexone Treatment

Inmaculada Almansa, Ph.D., IDYCA; Rosa Lopez-Pedrajas, IDYCA; and Teresa Esteban, IDYCA, Universidad CEU Cardenal Herrera; Jorge Garcia, Ph.D., Universidad Católica de Valencia; Maria Muriach, Ph.D., IDYCA; and Maria Miranda, Ph.D., IDYCA, Universidad CEU Cardenal Herrera; Francisco J. Romero, M.D., Ph.D., Universidad Católica de Valencia

It is known that many factors, both endogenous and exogenous, regulate the different stages of adult neurogenesis. Substances of abuse, including alcohol, have been implicated in one way or another in the regulation of neurogenesis in the adult central nervous system. Moreover, ethanol can exert its toxic action either by a direct effect because of the generation of free radicals or through its metabolites, mainly acetaldehyde. One of the treatments for the alcoholism is Naltrexone. It is used to reduce the reinforcing properties of alcohol because it is an opioid antagonist. At the same time it has been observed that Naltrexone has an anti-inflammatory and immunomodulatory effect. Therefore, to determine whether naltrexone is able to reverse oxidative stress and improve the neurogenesis caused by chronic ethanol consumption. Male SD rats were used. Chronic alcoholic liquid diet (5% v/v) was administered for six weeks. At 5th week rats were divided into four groups: control, control-naltrexone, ethanol, ethanol-naltrexone. Naltrexone was administered daily for the last two weeks of consumption of the diet, by intraperitoneal injection (1mg/kg). The rats that were not given naltrexone were injected the same volume of saline. To evaluate oxidative stress in rat hippocampus, glutathione and malondialdehyde (MDA) concentrations were measured by HPLC and glutathione peroxidase activity by spectrophotometric method. Neurogenesis was assessed by means of BrdU and DCX immunohistochemistry. Before 6 weeks of alcohol consumption an increase of MDA and a decrease of GSH concentration and GPx activity were observed in rat hippocampus, and naltrexone restored control values. On the other hand ethanol produces a decrease in the number of new neurons in the dentate gyrus. Again naltrexone does improve the number of DCX positive cells. Naltrexone that is used in the treatment of addiction, because of its properties as opioid antagonist, may show another beneficial action as an antioxidant, and it may improve the situation of oxidative stress that occurs in chronic alcoholism. Furthermore, naltrexone is able to protect the newly formed cells that are to become neurons.

BASIC SCIENCE/CELL & MOLECULAR BIOLOGY

104. Chronic Ethanol Consumption Effects on Rat Hippocampus: Oxidative Stress, Neurogenesis and Naltrexone Treatment

Inmaculada Almansa, Ph.D., IDYCA; Rosa Lopez-Pedrajas, IDYCA; and Teresa Esteban, IDYCA, Universidad CEU Cardenal Herrera; Jorge Garcia, Ph.D., Universidad Católica de Valencia; Maria Muriach, Ph.D., IDYCA; and Maria Miranda, Ph.D., IDYCA, Universidad CEU Cardenal Herrera; Francisco J. Romero, M.D., Ph.D., Universidad Católica de Valencia

It is known that many factors, both endogenous and exogenous, regulate the different stages of adult neurogenesis. Substances of abuse, including alcohol, have been implicated in one way or another in the regulation of neurogenesis in the adult central nervous system. Moreover, ethanol can exert its toxic action either by a direct effect because of the generation of free radicals or through its metabolites, mainly acetaldehyde. One of the treatments for the alcoholism is Naltrexone. It is used to reduce the reinforcing properties of alcohol because it is an opioid antagonist. At the same time it has been observed that Naltrexone has an anti-inflammatory and immunomodulatory effect. Therefore, to determine whether naltrexone is able to reverse oxidative stress and improve the neurogenesis caused by chronic ethanol consumption. Male SD rats were used. Chronic alcoholic liquid diet (5% v/v) was administered for six weeks. At 5th week rats were divided into four groups: control, control-naltrexone, ethanol, ethanol-naltrexone. Naltrexone was administered daily for the last two weeks of consumption of the diet, by intraperitoneal injection (1mg/kg). The rats that were not given naltrexone were injected the same volume of saline. To evaluate oxidative stress in rat hippocampus, glutathione and malondialdehyde (MDA) concentrations were measured by HPLC and glutathione peroxidase activity by spectrophotometric method. Neurogenesis was assessed by means of BrdU and DCX immunohistochemistry. Before 6 weeks of alcohol consumption an increase of MDA and a decrease of GSH concentration and GPx activity were observed in rat hippocampus, and naltrexone restored control values. On the other hand ethanol produces a decrease in the number of new neurons in the dentate gyrus. Again naltrexone does improve the number of DCX positive cells. Naltrexone that is used in the treatment of addiction, because of its properties as opioid antagonist, may show another beneficial action as an antioxidant, and it may improve the situation of oxidative stress that occurs in chronic alcoholism. Furthermore, naltrexone is able to protect the newly formed cells that are to become neurons.
105. Functional Family Therapy in Chile

Luis Caris, M.D., Dr.PH.; University of Chile; Holly Barrett Waldron, Ph.D.; Hyman Hops, Ph.D.; and Michael S. Robbins, Ph.D., Oregon Research Institute

Epidemiological studies have revealed that adolescent drug use is growing in countries in South America, including Chile. The government has worked to develop a clinical infrastructure on treatment for adolescent drug abuse. EBTs for drug abuse have been not transported to develop in Chile and consensus exists among Chilean researchers, mental health leaders, and government for adopting EBTs for drug abuse and related problems is a next step to improving treatment outcomes in Chile, with greater knowledge of preventive health practices. The confluence of a ready clinical infrastructure and other factors favoring health services and drug treatment availability places Chile in a unique position to pursue dissemination research on FFT for drug-abusing youth. An important pathway for EBT adoption and sustainability in developed and transition countries is scientist training. We obtained grant support in, 2010 from the Fogarty International Center. This research is conducted by U.S. and Chilean investigators, building partnerships between health research institutions in the U.S. and Chile. The goal of the collaboration in Chile is to develop effective and efficient methods for disseminating FFT in clinical practice settings. Through an initial pilot study, we will: (1) evaluate FFT feasibility for adolescent drug abuse, (2) enhance the ability of Chilean scientists to conduct clinical trials in Chile, and (3) prepare a foundation for future expansion of dissemination efforts. The FFT evaluation involves families of drug abusing youth. Families will be randomly assigned to services as usual (SAU) or FFT in combination with SAU. Implementation approach. The implementation of FFT in Chile has six core components: (1) staff selection, (2) effective training procedures, (3) continuous supervision, (4) continuous performance evaluation via supervision, (5) program evaluation, and (6) administrative involvement to foster implementation. Challenges and successes. The obstacles to dissemination we have encountered in the first year of the 3-year feasibility study include: (1) language barriers, (2) educating FFT model disseminators on unique implementation issues in Chile, (3) navigating governmental and nongovernmental organizations, (4) building stakeholder and provider motivation, (5) adapting concepts and tailoring the model for implementation at the community level, (6) launching the first training, (7) beginning the iterative process of intervention to fit the population, local providers, culture, and environment, and (8) establishing a structure for ongoing supervision. Model adaptation. The first step in addressing model adaptation is educating the FFT model disseminators. The lead trainer, was one month in Chile learn more about language and culture.- like., require that therapists, managers, and FFT trainers work together to generate appropriate solutions, for family therapy with the entire family system and ensuring that FFT can be integrated into the existing service programs. Structuring ongoing supervision. Chile is the most technologically advanced country. Building on this strength, we provided audio recorders to therapists on audio files. The trainer reviews these audio files prior to weekly conference calls with the clinical team, The behavioral observation, feedback, and coaching offered by this supervision is designed to build competent adherence among therapists and high levels of fidelity during the dissemination.
106. The Effects of Hepatitis C Virus Eradication on Cardiovascular Risk
Felipe Castillo, B.A.; Vanessa Haynes-Williams, R.N.; Mazen Noureddin, M.D.; and Christopher Koh, M.D., NIDDK, NIH; Robert Shander, M.D., National Heart, Lung and Blood Institute, NIH; Ahmed Ghahre, M.B., Ch.B.; Theo Heller, M.D.; T. Jake Liang, M.D.; Jay Hoofnagle, M.D.; and Yaron Rotman, M.D., NIDDK, NIH

Chronic hepatitis C (CHC) is a leading cause of liver disease, most commonly transmitted by contaminated blood, including shared needles or snorting devices among drug users. The disease can lead to cirrhosis liver-related mortality, liver cancer and transplant. Liver injury due to chronic hepatitis C virus (HCV) infection causes peripheral events in the entire body, including the cardiovascular system. It has been suggested that HCV infection may have an adverse effect on cardiovascular health. Interestingly, HCV infection is associated with a reduction in total and low-density lipoprotein (LDL) cholesterol levels, and this reduction is reversed by viral eradication. Whether this treatment-induced increase in cholesterol is associated with an increase in cardiovascular risk is unknown.

While prior studies have compared hepatic and non-hepatic patients, in this study we compared hepatic patients that responded to treatment with ones that did not. Our aim was to investigate whether successful treatment of chronic hepatitis C, defined as achievement of a sustained virological response (SVR), affects the cardiovascular risk of patients. Patients with a history of treated CHC were enrolled in a case-control, cross-sectional study comparing patients that had achieved an SVR (cases) with patients that failed treatment and remained infected with HCV (controls). Exclusion criteria included age below 30, hypertension, diabetes, HIV co-infection, use of cholesterol lowering medications or other causes of liver disease. All underwent standard ultrasound procedures to acquire images of longitudinal views of both carotid arteries. The intima-media thickness (IMT), a validated surrogate marker for generalized atherosclerosis and cardiovascular risk, was calculated as the average of 10 separate measurements over a 1 cm distance in three locations of the common carotid artery bilaterally. The investigator performed the measurements off-line and was blinded to the group assignment. A secondary end point, the coronary artery calcium score, was measured by non-contrast cardiac CT scan using the Agatston score by an independent clinician. Outcome measures were tested for significance using the Student’s two-tailed T-test or non-parametric tests when appropriate. 61 patients were enrolled, 31 in the SVR group and 30 in the infected group. The subgroups were matched for other risk factors, including age (51.3 year olds in cases vs. 52.5 year olds in controls), viral genotype and smoking status (%54 of cases and 60% of controls). Females were represented more in the SVR group (68% of cases and 33% of controls). As expected, there was a significant difference in total cholesterol (192.7 +/- 35.6 mg/dl in cases vs. 166.8 +/- 30.9 mg/dl in controls, p=0.002), LDL cholesterol (123.5 +/- 34.6 mg/dl in cases vs. 99.6 +/- 28.6 mg/dl in controls, p=0.24). Calcium scores were not significantly different between the groups. The results suggest that successful treatment of HCV does not alter the cardiovascular risk, and the lower cholesterol levels seen in patients with active infections are misleadingly low. Further analysis, including multi-variate analysis is pending and may yield additional results.

OTHER

107. Residential Treatment Services in West Central Mexico: Resources and Needs in Jalisco
Octavio Campillo, M.D., Ph.D.; CUCS University of Guadalajara; Fernando Diaz; and Claudia M Prado, CECAJ; James Cunningham, University of Arizona.

It is estimated that in Mexico there are over 1800 private or NGO run addiction clinics around the country, of which a significant number offer residential treatment. There has been little or no research documenting the actual services offered by those clinics. The aim of this study was to identify, classify, and analyze all residential treatment clinics in the west central state of Jalisco, Mexico. We conducted an on-site survey of all residential clinics in the state of Jalisco, Mexico, investigating organizational structure, resources, facilities, accessibility, treatment orientation, length of operation, financing, grants, prevention and outreach activities. As a part of the protocol we interviewed the Director or administrator of the clinic and visited the facilities. We surveyed 191 residential treatment clinics. The type was: 77 % self-help, 17 % combined medical-self help (M-SH), 5 % medical and 1 % alternative. Half of them are located in the Guadalajara metropolitan area and the rest around the state of Jalisco. Near 34 % of the clinics have operated for less than 5 years. One-third has operated for 5-10 years. Medical clinics typically have operated the longest (44% more than 15 years).

There was substantial variation in treatment program characteristics, with only 68 % (range 55-81) providing a written treatment program. There is a large variation in the performing and frequency of medical and psychological evaluations among the different types of clinics. Family therapy was offered by 23 % of the self-help clinics and 56 % of the medical clinics. Specialized professional personnel was concentrated primarily in the medical clinics. Self-help groups were typically deficient in or completely lacked specialized personnel. Regarding public funding, 22 % of the clinics (medical and M-SH) obtained 83.6 % of the funding while 77 % (self-help) obtained only 16 %. Medical and combined M-SH clinics, although not optimal, are better organized in terms of treatment programs and medical and psychological evaluations. They receive most of the public funding. Self-help clinics are the largest group offering residential treatment at a very low cost but lack standard programs, medical supervision, training and funding. Greater efforts in funding, supervision and training should be devoted to this (latter) group. An evaluation of program efficacy is needed for all of the treatment clinics.

108. Sodium Valproate for the Treatment of Cocaine-Dependent Patients in an Outpatient Detoxification Program
Maurice R. Samolski, M.D., Michigan State University

Cocaine dependence is a major public health problem; however, there is no FDA approved medication for cocaine dependence treatment. It is hypothesized that anticonvulsants could have a positive effect on cocaine withdrawal and craving based on their interaction with GABA neurotransmitter in the brain. There are experiences in some countries like Peru, where anticonvulsants, especially Sodium Valproate, are prescribed for these indications regularly with apparently good clinical results, but there is no scientific evidence that supports its use. The objective of this study is to generate evidence on the effectiveness of Sodium Valproate on cocaine withdrawal and craving and other treatments outcomes like days of abstinence and treatment retention in real treatment conditions. A randomized, double-blinded clinical trial will be conducted and study subjects will be treatment seeking cocaine-dependent individuals who voluntarily decide to enter an outpatient detoxification program of a rehabilitation center in Peru. All Subjects will receive a psychosocial intervention as it is usually delivered by this institution. Subjects will be randomized in two groups after meeting inclusion criteria and they will receive either TAU and the medication or TAU and the placebo for 28 days. There will be a baseline assessment following by repeated measures. Results will be analyzed with parametric and non-parametric methods according to the distribution and the type of variable and an Intention-to-Treat analysis will be used.
Conference Objectives

The 2011 NHSN Conference will focus on innovative scientific approaches that identify health disparities, intervene, and promote health equities in Hispanic populations. The scope of this conference builds on our understanding of etiologic processes that are common to a broad class of drug abuse, mental disorders and physical disorders, or those that are unique to specific disorders affecting Hispanic communities. These etiologic processes range from biologic to behavioral, to social-cultural concerns. A next stage of research involves interventions that address existing disparities, either from a preventive or treatment perspective. This is followed by a third stage of research addressing policies that move towards health equities, both in the United States and internationally. The planning committee for the 2011 conference was quite purposeful in designing a scientific program that addresses a variety of scientific issues that are trans-disciplinary in scope, and cover the spectrum of NHSN member interests. A preconference session will be led by Drs. Eric Brown and Alex Mason and will comprise a half-day workshop on statistical methods for evaluating intervention effects. Specifically, methods to analyze the effects of interventions that may vary in delivery or uptake and an illustration of the use of these methods in the context of the individual, families, schools, and communities using examples from applied prevention studies. Three plenary talks will highlight the main program. Dr. Charles Rotimi, the Director of the Center for Research on Genomics and Global Health at the NIH will present on the current knowledge of human genetic variation and how it contributes to our understanding of human evolutionary history, group identity, and health disparities; Dr. Nora Volkow, the Director of the National Institute on Drug Abuse, NIH will highlight recent findings on the consequences of acute and chronic drug exposure on epigenetic modifications, gene expression and cell function; brain circuit disruption in addiction; and factors involved in genetic vulnerability and resilience for drug abuse. The closing plenary for the conference will be given by Dr. Guilherme Borges, M.D. Instituto Nacional de Psiquiatria Ramon de la Fuente Muñiz Calzada Mexico, on results of the impact of Mexico-US Migration on substance use and suicidality. The opening panel will provide a view of epigenetics and its significance in understanding the link between biology and environment. Panelists will discuss how animal models can potentially inform our understanding of the role of epigenetics in disease patterns and the challenges of linking genome-wide epigenetic studies to population health. Following the opening panel will be a luncheon presentation by Dr. Jasjit Ahlawatla, Executive Director of the Center for Health Equity at the University of Minnesota Medical School, on successful career trajectories in academia. This dynamic and interactive session will present key issues for academic survival and success. The second scientific panel will feature three presentations focused on the role of race, culture, and context in the development of behavioral and pharmacological interventions to prevent and reduce health inequities among Hispanic populations. The third panel examines the implications of health care reform for policy and integrated care. Specifically, this panel will summarize key ACA provisions that are most relevant to behavioral health care including substance abuse-related services and how these provisions are being implemented at the federal, state, and local levels. Additionally, changes in the delivery system most likely to affect Latinos with substance abuse and mental disorders will be discussed. The 2011 NHSN Conference will feature several special interest breakout sessions of technical and substantive interest to our members, and mentoring and training activities to improve grant writing skills and scientific productivity. This will be a very exciting, innovative conference, once again spanning scientific perspectives from basic to applied sciences in all facets of conference activities.

Additional conference goals are to continue to move Hispanic drug abuse science towards interdisciplinary research and to provide mentoring and training activities to promote career development at multiple stages of the scientific trajectory, from graduate student to senior scientist. Activities include a Mentoring Luncheon, Poster Session, Breakout sessions on Research Priorities and Funding Opportunities with NIDA and New Investigators in Hispanic Drug Abuse Research Panel. The program concludes with a closing plenary presented by Dr. Guilherme Borges on the impact of Mexico-US migration on substance use and suicidality.

Continuing Education (CE)
American Psychological Association
Biscayne Institutes of Health & Living, Inc. is approved by the American Psychological Association to offer continuing education to psychologists. The Biscayne Institutes of Health & Living, Inc. maintains responsibility for the program.

August 25: 9 credit hours
August 26: 7 credit hours
August 27: 3 credit hours

Accreditation
This program is co-sponsored by The Biscayne Institutes of Health & Living, Inc. The Biscayne Institutes of Health & Living, Inc. is approved by the American Psychological Association to offer continuing education to psychologists. The Biscayne Institutes of Health & Living, Inc. maintains responsibility for the program.

Continuing Medical Education (CME’s)
The Biscayne Institutes of Health & Living, Inc. designates this educational activity as providing 24 Category 1 credits toward the Physician’s Recognition Award.

August 24: 5 credit hours
August 25: 9 credit hours
August 26: 7 credit hours
August 27: 3 credit hours

DCMA
This activity has been planned and implemented in accordance with the Essentials Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the DADE COUNTY MEDICAL ASSOCIATION and The Biscayne Institutes of Health & Living, Inc. and The Hispanic Network. The DADE COUNTY MEDICAL ASSOCIATION is accredited by the FLORIDA MEDICAL ASSOCIATION to provide continuing medical education to physicians.

The DADE COUNTY MEDICAL ASSOCIATION designates this educational activity for a maximum of 24 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

2011 Conference Fees
The NHSN Annual International Conference has costs associated with the conference, such as registration fees, travel, lodging and some meals. The registration fee for the 2011 conference is $100.00 for students and $150.00 for senior scientists. Non-members will be charged an additional $50.00.

In order to receive full contact-hour credit for the CE’s and CME’s activity, you must:
• Sign in for the session at the registration/continuing education table
• Be present at the entire session/day
• Remain until the scheduled ending time
• Complete and submit the evaluation form to the registration/continuing education table before you leave at the conclusion of the session

Please note: sign in sheets for APA (CE’s) & DCMA (CME’s) are separate. Please make sure you sign in on the correct sheet legibly.
• Certificates will for DCMA and APA will be issued separately by NHSN National Office.

Conflict of Interest
A conflict of interest occurs when an individual has an opportunity to affect educational content about healthcare products or services of a commercial interest with which she/he has a financial relationship. There is no conflict of interest at the NHSN conference.

Commercial Support
There is no commercial support for this conference. Support is provided by a grant from the National Institute on Drug Abuse.
Federal Liaisons

National Institute on Drug Abuse (NIDA)

Ana Anders, L.I.C.S.W.
Senior Advisor on Special Populations
Office of Special Populations

Kevin Conway, Ph.D.
Deputy Director, Division of Epidemiology
Services and Prevention Research

Jean Lud Cadet, M.D.
Chief, Molecular Neuropsychiatry Branch

Marta De Santis, Ph.D.
Regulatory Affairs Specialist
Division of Pharmacotherapies and Medical Consequences of Drug Abuse

Joseph Frascella, Ph.D.
Director, Division of Clinical Neurosciences & Behavioural Research

Steve Gust, Ph.D.
Director, NIDA International Program

Raul Mandler, M.D.
Senior Medical Officer
Center for Clinical Trials Network

Iván Montoya, M.D., M.P.H.
Deputy Director, Division of Pharmacotherapies and Medical Consequences of Drug Abuse

Jacques Normand, Ph.D.
Director, AIDS Research Program

Elizabeth Robertson
Senior Advisor for Prevention, Division of Epidemiology
Services and Prevention Research

Carmen Rosa, M.S.
Regulatory Affairs Specialist

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)

Mario Cerritelli, Ph.D.
Chief, Career Development and Outreach Branch

Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)

Rebecca Clark, Ph.D.
Chief, Demographic and Behavioral Sciences Branch

National Institute of Neurological Disorders and Stroke (NINDS)

Courtney Ferrell Aklín, Ph.D.
Program Director, Office of Special Programs in Diversity

National Institute on Alcohol Abuse and Alcoholism (NIAAA)

Judith Arroyo, Ph.D.
NIH Minority Health Disparities Coordinator

Abraham P. Bautista, Ph.D.
Director, Office of Extramural Activities
Executive Secretary, National Advisory Council

Dionne C. Godette, Ph.D.
Health Scientist Administrator,
Division of Epidemiology and Prevention Research

Philippe Marmillot
Scientific Review Officer,
Office Of Extramural Activities / Review Branch

Ranga V. Srinivas, Ph.D.
Chief, Extramural Projects Review Branch,
Office of Extramural Activities

National Cancer Institute (NCI)

Pebbles Fagan, Ph.D., M.P.H.
Health Scientist, Tobacco Control Research Branch

Ofelia Olivero, Ph.D.
Director, Laboratory of Cancer Biology and Genetics

National Institute on Aging (NIA)

Alfonso R. Latoni, Ph.D.
Deputy Chief, Scientific Review Branch

National Eye Institute (NEI)

Nora Salgado
Organizational & Workforce Development Manager

National Institute of Mental Health (NIMH)

LeShawndra Price, Ph.D.
Office for Research on Disparities and Global Mental Health

Michael A. Sesma, Ph.D.
Health Scientist Administrator, Division of Developmental Translational Research

National Institute of General Medical Sciences (NIGMS)

Hinda Zlotnik, Ph.D.
Chief, MBRS Branch, Division of Minority Opportunities in Research (MORE)
Conference Planning Subcommittee

C. Hendricks Brown, Ph.D.
2011 Conference Co-Chair
University of Miami Miller School of Medicine

Sergio Aguilar-Gaxiola, M.D., Ph.D.
University of California, Davis

Hortensia Amaro, Ph.D.
Northeastern University

Margarita Alegría, Ph.D.
Health Research, Cambridge Health Alliance

Alice Cepeda, Ph.D.
Center for Drug & Social Policy Research Graduate College of Social Work, University of Houston

Antonio Cepeda-Benito, Ph.D.
Texas A&M University

Marie A. DiCowden, Ph.D., FNAP
Biscayne Institutes of Health & Living, Inc. Affiliated with New York Institute of Technology/New York College of Osteopathic Medicine

Eugene Eisman, MD, FACP
Volunteer Clinical Assistant Professor
University of Miami Miller School of Medicine

Junius J. Gonzales, M.D., M.B.A.
The University of Texas at El Paso

Earnest Marquez, Ph.D.
Society for Advancement of Chicanos and Native Americans in Science

Diana Martinez, M.D.
Columbia University

Ian Mendez, Ph.D.
University of California, Irvine

Yonette F. Thomas, Ph.D.
2011 Conference Co-Chair
Howard University, Washington, DC

Patricia E. Molina, M.D., Ph.D.
NHSN Chair
Louisiana State University Health Sciences Center

William A. Vega, Ph.D.
Vice-Chair, NHSN Provost Professor, & Director, Roybal Institute University of Southern California

Hilda Pantin, Ph.D.
NHSN Executive Director
University of Miami Miller School of Medicine

Laura O’Dell, Ph.D.
University of Texas El Paso

Guillermo Prado, Ph.D
University of Miami Miller School of Medicine

José Szapocznik, Ph.D.
University of Miami Miller School of Medicine

Maria Elena Medina-Mora, Ph.D.
Instituto Nacional de Psiquiatría Ramón de la Fuente, Mexico

Steffanie A. Strathdee, Ph.D.
University of California, San Diego

Avelardo Valdez, Ph.D.
Center for Drug & Social Policy Research Graduate College of Social Work, University of Houston

POSTER SESSION & NEW INVESTIGATORS PANEL COMMITTEE

Laura O’Dell, Ph.D.
University of Texas El Paso

Victoria Ojeda, Ph.D., M.P.H.
UCSD School of Medicine

Mildred, Maldonado-Molina, Ph.D.
University of Florida College of Medicine

Nelson Tiburcio, Ph.D.,
National Development and Research Institutes, Inc.

Ian Mendez, Ph.D.
University of California, Irvine
Special Thanks

Ana Anders, L.I.C.S.W., National Institute on Drug Abuse, National Institutes of Health

Judith Arroyo, Ph.D., National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health

Steve Gust, Ph.D., National Institute on Drug Abuse International Program, National Institutes of Health

Ernest Márquez, Ph.D., Society for Advancement of Chicanos and Native Americans in Science

Louisiana State University Health Sciences Center, School of Medicine and the Comprehensive Alcohol Research Center of Excellence

Center for Prevention Implementation Methodology for Drug Abuse and Sexual Risk Behavior (Ce-PIM), University of Miami Miller School of Medicine

Alice Cepeda, Ph.D., Center for Drug & Social Policy Research Graduate College of Social Work, University of Houston


STAFF

Betsy Giaimo, 2011 Conference Coordinator, Louisiana State University Health Sciences Center

Jane Brooks, MSc, C.M.P, University of Miami Miller School of Medicine

Sheila Kaupert, M.P.H., University of Miami Miller School of Medicine

Nicole Cano, M.P.H., University of Miami Miller School of Medicine

National Hispanic Science Network on Drug Abuse
University of Miami Leonard M. Miller School of Medicine
1425 NW 10th Avenue, Suite 301
Miami, Florida 33136
Tel: 305.243.2340  Fax: 305.243.5577
www.hispanicscience.org
Conference Room Layout
Westin Colonnade, Coral Gables, FL

First Floor

Aragon B

Aragon

EAST COURT

Gables
Merrick Ballroom

WEST COURT

Ponce de Leon
de Soto
Prado

Colonnade

Balboa
Segovia Plaza

Pathways Toward Health Equities in Hispanic Populations