

UCLA
Integrated Substance Abuse Programs

Biennial Report
July 1, 2010, to June 30, 2012



ISAP Mission

The UCLA Integrated Substance Abuse Programs (ISAP), organized within the Department of Psychiatry and Biobehavioral Sciences at the David Geffen School of Medicine at UCLA, works to:

- Develop and evaluate new approaches for the treatment of substance use disorders;
- Move empirically supported treatments into mainstream application through dissemination of research findings and practice improvement efforts;
- Advance the empirical understanding of substance use disorders and support efforts to ameliorate related problems through clinical training provided to physicians, counselors, and other healthcare workers;
- Investigate the epidemiology, neurobiology, health and social consequences, treatment, and prevention of substance use disorders.



UCLA Integrated Substance Abuse Programs (ISAP)

Biennial Report

Fiscal Years 2011 and 2012

(July 1, 2010, to June 30, 2012)

Director

Walter Ling, M.D.

Associate Directors

Richard A. Rawson, Ph.D.

Christine E. Grella

Senior Advisor

M. Douglas Anglin, Ph.D.

(former Associate Director, 1998–2010)

UCLA Integrated Substance Abuse Programs (ISAP)
Semel Institute for Neuroscience and Human Behavior
Department of Psychiatry and Biobehavioral Sciences
David Geffen School of Medicine at UCLA
11075 Santa Monica Blvd., Suite 100
Los Angeles, CA 90025-7535

Phone: (310) 267-5020

Fax: (310) 268-9374

www.uclaisap.org

Writer

Brian Perrochet

Editor

Kris Langabeer

Contents

ISAP's Increasing Leadership in Addiction Medicine, 5

Synopsis of ISAP Research and Related Activities, 6

Organizational Structure, 10

Service Centers, 11

 Training Center, 11

 Program Evaluation Services, 11

 Data Management Center, 12

Treatment Services, 13

Publications, 16

Principal Investigators, 28

Projects, 34

Basic Science/Neurophysiology/Imaging, 34

Clinical Trials and Medication Development, 35

Criminal Justice Populations, 41

Healthcare Reform and Integration of SUD Treatment with Primary Care, 49

HIV/AIDS, 51

International Research and Training, 53

Natural History / Treatment Process and Outcomes, 55

Program Evaluation, 58

Special Populations and Topics, 63

Substance Use Disorders Policy, 68

Training and Dissemination, 68

Women's Substance Use Disorders Issues, 73

Alphabetical Listing of Projects, 80

UCLA Affiliates, 82

Community Affiliates, 83

ISAP's Increasing Leadership in Addiction Medicine

After more than a decade of work in the addiction medicine field conducting research, delivering training, and advising groups of policy makers and service providers, the UCLA Integrated Substance Abuse Programs (ISAP) is recognized as one of the world's leading organizations involved in efforts to advance research and treatment for substance use disorders. Having endured and even expanded during budgetary difficulties among research sponsors at all governmental levels, ISAP remains well positioned to extend that process. The group continues to advance the knowledge base on substance use disorders and related problems and to improve the delivery of treatment services through diverse efforts. Examples of ongoing efforts include:

- Continued development of medication and behavioral treatments through ISAP's role leading the Pacific Region Node of NIDA's Clinical Trials Network and through clinical trials of medications (e.g., methylphenidate for methamphetamine dependence, and long-acting depot buprenorphine for opioid dependence) and behavioral treatments (Cognitive Behavioral Therapy and Contingency Management). ISAP also is investigating alternative/complementary approaches such as mindfulness/meditation, drumming, and aerobic exercise for methamphetamine dependence.
- Strengthened ISAP as a resource for methodological expertise via the NIDA-funded Center for Advancing Longitudinal Drug Abuse Research.
- Expanded international clinical research and training efforts in China, Taiwan, Thailand, Vietnam, and the Middle East.
- Increased research attention on special populations, including drug-using offenders via NIDA's Pacific Coast Center for Criminal Justice Drug Abuse Treatment Studies and studies on prison services and post-release services; many other efforts focus on HIV-infected drug-using individuals (including mothers), women, adolescents, and gay and transgender populations.
- Hosted research training programs in addiction research methods via the NIH-funded training programs for pre- and post-doctoral fellows as well as for international visiting research scholars from Australia, Brazil, China, Egypt, Iraq, and Saudi Arabia.
- Increased dissemination of knowledge about substance use disorders, research-based interventions, and innovative treatment modalities and practices throughout the nation via the Pacific Southwest Addiction Technology Transfer Center, technical assistance contracts for the State of California and Los Angeles County Mental Health, as well as through other trainings delivered around the nation and the world.
- Broadened and strengthened technical assistance collaboration with government agencies via contracts with Los Angeles County Substance Abuse Prevention and Control and the California Department of Alcohol and Drug Programs.

ISAP will continue to advance the empirical understanding of substance use disorders, develop and evaluate new approaches for the treatment of addiction, and support efforts to reduce substance use and related problems.

Synopsis of ISAP Research and Related Activities

The UCLA Integrated Substance Abuse Programs (ISAP) conducts research, provides research training and clinical training, and arranges treatment for substance use disorders in coordination with the UCLA Department of Psychiatry and Biobehavioral Sciences and in affiliation with community-based treatment providers. ISAP efforts range from epidemiological and policy studies to basic science and human laboratory research to clinical trials of innovative behavioral therapies and pharmacotherapies. ISAP activities are briefly summarized below:

Basic Science/Neurophysiology/Imaging

An extensive program of brain imaging research is coordinated with a program of cognitive and neuropsychological assessment, using imaging approaches (e.g., PET and fMRI) to study brain changes and physiologic responses to nicotine, methamphetamine, cocaine, and other substances.

Clinical Trials of Treatments for Substance Use Disorders

ISAP directs the Pacific Region Node of the National Institute on Drug Abuse (NIDA) Clinical Trials Network (CTN). The Node includes a geographically and clinically diverse group of community treatment programs throughout California and Hawaii. In concert with other CTN nodes across the country, the Pacific Region Node conducts research on innovative treatments for substance use disorders. ISAP investigators are conducting clinical trials on behavioral approaches, including contingency management (in the United States and China), mindful meditation, aerobic exercise, technology-supported cognitive behavioral therapy, and traditional Native American healing approaches.

Consistent with NIDA's increased emphasis on developing effective medications for substance use disorders, ISAP investigators have been instrumental in the development and implementation of several medications for opioid dependence, including buprenorphine for opioid dependence. Recent ISAP research on Probuphine®, the long-acting, implant

formulation of buprenorphine, confirmed clinical utility of this new and important pharmacotherapy. A long-acting depot form of naltrexone (Vivitrol®) for opioid dependence was recently approved based on research involving ISAP Director Walter Ling, M.D. ISAP's innovative development of pharmacotherapies for stimulant dependence includes buprenorphine for cocaine dependence as well as methylphenidate and a combination of bupropion and naltrexone for methamphetamine dependence.

Criminal Justice Populations

ISAP researchers have conducted comprehensive reviews of drug treatment in the criminal justice system and have examined treatment programs focused on women offenders and ethnic minorities under criminal justice supervision. Other work has investigated the differential effects of incarceration, parole, and methadone maintenance on drug use and criminal behavior, and has documented the effects of civil commitment and other forms of compulsory treatment. ISAP investigators have explored the relationship between drug use and crime, including outcomes of treatment for drug-using offenders and the role of drug use in perpetuating the cycle of crime among offenders. ISAP's Pacific Coast Research Center is a component of the NIDA Criminal Justice Drug Abuse Treatment Services Research System, a nationwide effort to optimize treatment for drug-using individuals under criminal justice supervision.

Health Care Reform and Integration of SUD Treatment with Primary Care

As a result of the Affordable Care Act of 2010 (ACA), the substance use disorder (SUD) treatment field now faces the most significant and sweeping changes that it has experienced in decades. Access to SUD services is expected to expand dramatically through integration with primary care, particularly in settings such as federally qualified health centers.

A growing body of literature suggests that patients receiving SUD services that are integrated with primary care have better outcomes and reduced costs relative

to patients receiving non-integrated care. Through multiple contracts and grants, ISAP is both studying the evolution of integration throughout the state and facilitating it through training and technical assistance activities.

Health Services

Studies by M. Douglas Anglin (one of the ISAP founders) and William McGlothlin in the 1970s on the impact of methadone treatment initiated the UCLA tradition of studying how addiction treatment services impact the community and how the methods of delivering these services influence their effectiveness. Recently, ISAP researchers have been leading an extensive array of efforts on the integration of substance use disorder services into the broader primary care system. For example, screening, brief intervention, and referral to treatment (SBIRT) is an efficient approach that will improve identification and treatment of substance use disorders in the U.S. healthcare system.

HIV/AIDS

Since the early 1980s, ISAP researchers have investigated HIV/AIDS among drug users and have participated in community-based interventions to combat HIV, including tracking long-term trends in risk behaviors among drug-using arrestees. A series of studies testing psychosocial predictors of HIV risk reduction led to the development of a culturally congruent HIV education program serving drug users in Los Angeles. Several NIDA-funded projects have evaluated the effectiveness of a variety of behavioral and pharmaceutical interventions designed to reduce risk of HIV infection among drug users. In addition, ISAP's Health Risk Reduction Projects (HRRP) conducts HIV/AIDS behavioral research on children, adolescents, adults, and families. HRRP has examined the impact of maternal HIV/AIDS on children in an ongoing 15-year longitudinal study.

Implementation Science and Practice Improvement

A major focus of ISAP efforts is increasing the real-world application of research-proven treatment techniques, often termed "implementation science" or "research to practice." Several ISAP projects have formed and supported networks of community-based treatment providers and researchers committed to improving the quality of interaction among service providers, policymakers, researchers, and members of the community. These efforts continue to provide educational activities, assist community programs with the use of evidence-based screening and treatment practices, and foster new collaborative projects in the community.

International Research and Training

ISAP personnel conduct extensive training throughout the world, disseminating research methods and proven clinical practices through their direct efforts and by hosting conferences. ISAP investigators carry out ongoing collaborative research and training efforts in Australia, China, Egypt, Iraq, Israel, Palestine, United Arab Emirates, South Africa, and Vietnam. ISAP coordinated the worldwide "Treatnet" capacity-building effort by the United Nations Office on Drugs and Crime to train clinical professionals in best practices regarding assessment and treatment of substance use disorders and related consequences. In addition, ISAP directors have contributed to United Nations/World Health Organization policymaking efforts to address global drug problems. ISAP also continues to offer training through the NIDA INVEST program for addiction medicine researchers and clinicians who engage in year-long fellowships at ISAP.

Natural History, Treatment Process, and Outcomes

ISAP is the lead organization or a participating member in major treatment outcome evaluations at the national level, across California, and in the Los Angeles area. Specific research projects focus on treatment effectiveness for dually diagnosed patient

populations and development of enhanced strategies for engaging difficult-to-treat and special populations. These research efforts involve ISAP researchers who are expert in the design and application of advanced analysis techniques such as structural equation models, hierarchical linear models, latent curve models, and latent transition models. Incorporation of these techniques into ISAP investigations ensures rigorous research and reliable findings. Several publications produced by ISAP researchers have been used as guides for the application of statistical methods to social science research. Based on ISAP's standing as the leading repository of expertise in longitudinal research on drug abuse, ISAP hosts the NIDA-funded Center for Advancing Longitudinal Drug Abuse Research.

Program Evaluation

A full array of evaluation and consultant services is provided by ISAP's *Program Evaluation Services*, including needs assessment, culturally competent evaluation planning and study design, methods for improving priority scores of funding applications for projects with evaluation components, performance and outcomes monitoring, and evaluation data collection and analysis (including GPRA). ISAP assists in program evaluation at any stage, including helping programs secure grant funding and improve their programs during the proposal development stage. ISAP has evaluated numerous projects conducted locally by Los Angeles agencies, as well as around the nation, including a number of projects funded by state and federal grants. The number of sample participants in these projects range from 40 to 10,000. The evaluations vary in scope from outcome reports involving a small number of variables, such as retention and engagement in treatment, to complex analyses of multiple measures of performance and outcomes collected longitudinally.

Special Populations and Topics

ISAP researchers have examined patterns of substance use disorders and associated behaviors as they relate to individual/demographic characteristics,

with recent work examining genetic-based variations. Research has shown that treatment can be more effective when designed to accommodate the unique needs of special populations, such as individuals who are dually diagnosed (with substance use disorders and mental health disorders), adolescents, the homeless, welfare recipients, the disabled, or gay, bisexual, and/or transgender populations. In addition, the engagement and retention of such persons in treatment require targeted efforts informed by research.

Substance Use Epidemiology

ISAP participates in several ongoing studies of substance use epidemiology and associated behaviors, including analyses of national representative databases (e.g., National Household Survey on Drug Use and Health, National Epidemiologic Survey on Alcohol and Related Conditions), and conducts analyses of statewide and local household survey and treatment utilization data. ISAP investigators participate (representing Los Angeles) in the NIDA-supported Community Epidemiologic Workgroup (CEWG), which meets biannually to report on continuing and emergent drug use trends using multiple sources of data, as well as in the biannual Substance Abuse Research Consortium (SARC), which reports on emerging drug-use trends and their policy-related implications for the State of California. ISAP investigators also conduct qualitative studies of emergent drug use trends and subpopulations, using focus groups, site visit observations, and in-depth interviewing.

Drug Policy Issues

Serving in an advisory capacity, senior members of ISAP have supported efforts of the U.S. Attorney General's office, the White House Office of National Drug Control Policy, four directors of NIDA, the director of the Center for Substance Abuse Treatment (CSAT), and agencies and organizations in many states and counties. Senior

ISAP scientists have provided expert testimony before Congress, state legislatures, the Food and Drug Administration, and the United Nations.

Training and Dissemination

Many ISAP professionals contribute to the UCLA education mission by providing coursework and lectures within the University. ISAP personnel also provide training in treatment protocols and research processes, delivering hundreds of workshops and presentations in the United States and abroad. ISAP's NIH/NIDA-funded Drug Abuse Research Training Center supports annual fellowships for predoctoral and postdoctoral fellows. In addition, ISAP is the administrative home of the Pacific Southwest Addiction Technology Transfer Center (Pacific Southwest ATTC), one of 10 regional centers supported by the Center for Substance Abuse Treatment. The Pacific Southwest ATTC provides training, technical assistance, and collaborative promotion of empirically proven substance use disorders treatment practices. Like the CTN, the Pacific Southwest ATTC increases knowledge about and improves the delivery of effective treatments for substance use disorders. Recently, the Pacific Southwest ATTC has provided training on healthcare reform; integration of primary care and behavioral health services; screening, brief intervention, and referral to treatment (SBIRT); medication-assisted treatment for opioid and alcohol use disorders; and motivational interviewing. For the past five years, ISAP has partnered with the Los Angeles Department of Mental Health to provide comprehensive training and technical assistance to the local mental health clinical workforce on co-occurring substance use and mental health disorder screening and treatment intervention. ISAP researchers annually produce approximately 100 publications in peer-reviewed journals and present research findings at scientific meetings throughout the world.

Treatment Services

The UCLA Alcoholism and Addiction Medicine Service, based at the Resnick Neuropsychiatric

Hospital at UCLA, provides comprehensive, evidence-based assessment and treatment in a caring and confidential environment. The program is directed by ISAP's Karen Miotto, M.D., and Larissa Mooney, M.D., and offers partial hospitalization and inpatient/detoxification services, as well as an outpatient clinic. The program coordinates outpatient treatment with aftercare, which occurs at the ISAP-affiliated network of community-based outpatient clinics: Matrix Institute on Addictions, Tarzana Treatment Centers, Friends Research Institute, and others. This clinical system supports patient care, teaching, research training, clinical training, and research activities.

Women's Substance Use Disorder Issues

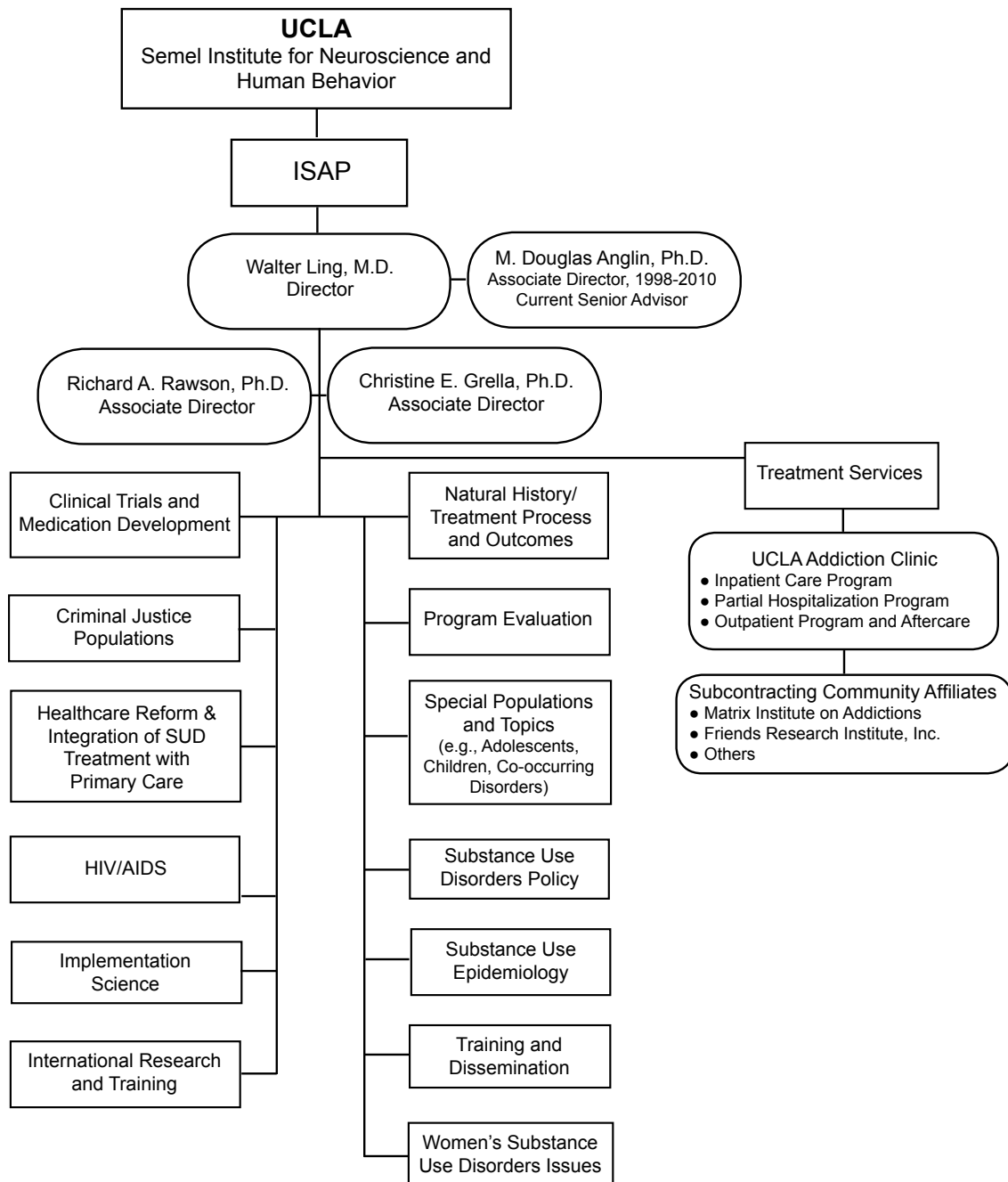
ISAP researchers are making significant contributions to the growing body of research on the particular needs of women substance users. These include studies of women in gender-specific treatment programs (e.g., the organizational characteristics of these programs, the evidence basis for treatment models, and treatment outcomes); outcomes of women and their children who come into contact with child welfare services; evaluations of programs developed for women offenders, both in correctional programs and community settings that involve innovative arrangements between corrections and treatment; and longitudinal examinations of gender differences in drug use, treatment, other service system interactions, and recovery over the life course. ISAP researchers also participate in numerous advisory boards for state and national policymakers on applying research findings to improve the delivery and outcomes of treatment for women with substance abuse disorders.

Organizational Structure

The UCLA Integrated Substance Abuse Programs (ISAP) is a unique organization with long-established connections with the substance abuse treatment community. As illustrated below, the Semel Institute for Neuroscience and Human Behavior is ISAP's institutional home,

as well as the setting for inpatient treatment for substance abuse disorders. Contractual affiliations with Friends Research Institute, Inc., and the Matrix Institute on Addictions are important elements of the ISAP research program.

UCLA Integrated Substance Abuse Programs (ISAP) Organizational Structure



Service Centers

Training Center

The ISAP Training Center provides state-of-the-art training on a wide range of topics, including the impact of substance abuse; effective behavioral and medical treatment strategies; co-occurring disorders; screening, brief intervention, and referral to treatment (SBIRT); and research ethics and procedures. Drawing on the expertise and experience of all ISAP investigators, the Training Center also develops opportunities to disseminate research findings to scientific and treatment communities.

The Training Center is the hub for several projects, including the Pacific Southwest Addiction Technology Transfer Center (Pacific Southwest ATTC), ISAP research training, the Los Angeles County and Orange County Co-Occurring Disorders Training Initiatives, a statewide training and technical assistance initiative for substance use disorders treatment providers, and several ad hoc training activities requested by members of the community.

Training staff also provide in-house training in the use of the Structured Clinical Interview for the DSM (SCID) and the Addiction Severity Index (ASI), as well as individualized courses upon request. Since 2001, the Training Center has provided training to more than 40,000 individuals in more than 750 events.

Over the past several years, a centerpiece of Training Center activities has been the California Addiction Training and Education Series (CATES). These training events bring together treatment providers with leading experts in the field to learn new information and develop skills specific to treating substance-using populations. Training Center services are available to non-UCLA researchers.

Please visit www.psattc.org for more information, or contact Thomas Freese at (310) 267-5397.

Program Evaluation Services

ISAP Program Evaluation Services offers a full array of evaluation and consultant services including:

- Needs assessment and program development
- Culturally competent evaluation planning and design
- Methods for improving grant priority scores
- Monitoring of performance and outcomes
- Evaluation data collection and analysis (including GPRA)

ISAP assists in program evaluation at all stages of development, including helping programs secure grant funding and improve their programs during the planning and grant proposal stage. ISAP has

evaluated numerous projects conducted locally by Los Angeles agencies, as well as around the nation, including a number of projects funded by state and federal grants. The number of sample participants in these projects ranges from 40 to 10,000. The evaluations vary in scope from outcome reports for a small number of treatment-process variables such as retention and engagement in treatment, to complex analyses of multiple measures of performance and outcomes collected longitudinally.

For more information, please visit <http://www.uclaisap.org/evaluation/index.html> or contact ISAP's Evaluation Services Director Anne Bellows, MSW, at abellows@mednet.ucla.edu.

All inquiries are welcome.

Data Management Center

The ISAP Data Management Center (DMC) is a full-service data center that handles forms printing and collating, data acquisition, and the transfer, cleaning, reporting, and storage of data. The DMC currently supplies the data needs of more than 20 projects conducted in six local clinics and three multisite projects conducted in locations outside of Los Angeles.

The DMC uses the Verity Teleform data system for both Web entry and fax-based data capture. Web capture provides images of forms in a Web browser for data entry into a secure data server over the Internet. For projects that collect data on paper and want to skip the data-entry step, the faxed-based system allows images of forms to be translated directly into alphanumeric data. The DMC has

created more than 1,000 measures for ISAP studies and receives an average of 30 fax transmissions a day. These transmissions result in the entry of more than 500 pages of data into the databases every business day.

The DMC recently expanded its PC- and Web-based data capture methods. Several projects have become completely paperless using this technology.

For more information, please visit www.isapdmc.org. Inquiries from both UCLA and non-UCLA researchers are welcome. Please contact David Bennett, director of the DMC, at (310) 267-5330 or davebenn@ucla.edu.

Treatment Services

UCLA Alcoholism and Addiction Medicine Service

UCLA ISAP utilizes and supports the UCLA Addiction Medicine Service, located at the Resnick Neuropsychiatric Hospital at UCLA. Researchers at UCLA and elsewhere continue to develop new and increasingly effective medical and psychological treatments to hasten substance abuse recovery.

The UCLA Addiction Medicine Service, which is directed by Karen Miotto, M.D., provides comprehensive, scientifically based assessment and treatment in a caring and confidential environment. Co-occurring psychiatric and substance use disorders involving numerous substances are treated, including alcohol, prescription pain medications, cocaine, methamphetamine, opiates, benzodiazepines, and club drugs (e.g., Ecstasy and GHB).

An interdisciplinary team of experts offers a complete continuum of care based on the individual's needs, including inpatient and outpatient detoxification, partial hospitalization, structured outpatient treatment, and aftercare.

Treatment incorporates any or all of the following:

- addiction and recovery education
- Matrix Model of relapse prevention
- family involvement
- psychoeducational groups
- medication (when appropriate)

Scope of Services

Inpatient Care Program

The Inpatient Care Program is housed in the UCLA Neuropsychiatric Hospital's pavilion on the UCLA campus in Westwood (Los Angeles), California. This eight-bed, inpatient unit specializes in the treatment of adults with co-occurring psychiatric and substance use disorders. Based upon the patient's

specific needs, a combination of physician addiction specialists, psychologists, licensed clinical social workers, and registered nurses join together to form a highly personalized treatment team to facilitate the individual's recovery. In addition to the medical management of substance abuse disorders, patients are assessed, diagnosed, and treated for any psychiatric or medical complications stemming from or affecting their substance use disorder. Referral to residential treatment programs for patients who require long-term inpatient treatment is also arranged.

Partial Hospitalization Program

The UCLA Partial Hospitalization Program helps patients transition from an inpatient to outpatient treatment setting and provides a structured environment for patients who do not need 24-hour supervision after detoxification but require more intensive care than an outpatient setting can provide.

Outpatient Care Program

The Outpatient Care Program, directed by Timothy Fong, M.D., provides a range of outpatient services including an outpatient addiction clinic offering medication management for substance use disorders, behavioral addictions, and co-occurring psychiatric disorders. Collaboration with psychosocial treatment providers in the community is provided, allowing individuals to continue to work and perform daily activities while pursuing addiction treatment.

For more information, call (310) 825-9989 or (800) 825-9989.

Matrix Institute on Addictions

Many of UCLA ISAP's research studies take place in the community-based treatment programs of the Matrix Institute on Addictions. The Matrix Institute was established in 1984 to promote a greater understanding of addiction disorders and to improve the quality and availability of addiction treatment services through treatment, training, and research. Matrix is a nonprofit organization that delivers outpatient drug and alcohol treatment services in four clinics in two Southern California counties. One of the sites is an opioid treatment program (OTP). In the past year (2011), more than 1,000 patients received treatment from the Matrix Institute in the four Matrix clinics. Over the past 28 years, more than 50 research projects and grants have been conducted at Matrix Institute sites, either by Matrix alone or in collaboration with investigators from UCLA and Friends Research Institute.

The Matrix training department has grown significantly over the past five years to include six trainers who have traveled nationally and internationally training people in the Matrix Model of Intensive Outpatient Treatment. From 2005–2012, more than 2,000 individuals received Matrix Model training delivered in 50 states and 16 countries. A model of dissemination has been developed that has resulted in an international network of over 400 Matrix Model Key Supervisors who are experts in their respective facilities in the structuring and delivery of the Matrix treatment program. A Matrix Model Certification program was developed in 2009 to meet the demands of those people and organizations asking for a way to discern which of the programs delivering the Matrix Model are doing so with fidelity to the protocols. A conference for Matrix Key Supervisors has been held twice in the last three years.

The Matrix Model of Treatment for Substance Abuse Disorders

The Matrix Model of intensive outpatient treatment was developed with an awareness of the diversity of problems that contribute to addictive disorders. To produce the best opportunity for success, the needs of the individual patient are considered in the design of each treatment plan. Matrix manuals have been published by the Center for Substance Abuse Treatment (CSAT) and Hazelden Publishing for the treatment of adults, adolescents, and Native Americans using the Matrix Model of Intensive Outpatient Treatment. These manuals have been developed and evaluated with funding from the National Institute on Drug Abuse, the Center for Substance Abuse Treatment, and the National Institute on Alcoholism and Alcohol Abuse.

At the Matrix Institute, the elements chosen to create optimal treatment plans include strategies and methods that have been demonstrated to be effective with substance abuse disorders. The intensity, duration, and content of treatment vary for individual patients, but certain key elements that are significantly related to treatment success are included within all Matrix treatment plans. They are:

Motivational Interviewing (MI)

Motivational Interviewing is a style of therapy that is designed to respect clients while helping them move toward making health-related changes. Matrix therapists have used this style of counseling for over 20 years. This non-confrontational, flexible, and accepting style is a hallmark of the Matrix Model of treatment and the use of it creates a nurturing relationship in which the client can thrive and successfully heal.

Cognitive Behavioral Therapy (CBT) – including Relapse Prevention (RP)

Cognitive behavioral techniques that emphasize the important role of thinking in how we feel and what we do are utilized throughout the treatment process at Matrix. Clients are taught to identify events that precede alcohol and/or drug use and change their thoughts and behaviors in response to these events. They are also taught skills to assist them in stopping alcohol and drug use, preventing relapse, and living an alcohol- and drug-free life.

12-Step Facilitation

Numerous outcome reports have demonstrated that patients who are involved in a 12-step or other support group have far better outcomes than patients who are not involved in such programs. Every Matrix clinical office hosts an onsite 12-step meeting for the clients at that location.

Contingency Management (CM)

Reinforcing positive behaviors during treatment has been shown to be highly effective in achieving a variety of substance abuse treatment goals. The Matrix Model incorporates incentives into its program by rewarding alcohol- and drug-free test results, attendance at treatment sessions, the use of skills learned during group, and the accomplishment of goals set during treatment.

Family Involvement

Families are involved regularly in the treatment process at Matrix because the more they understand the process of addiction and recovery, the more helpful they can be in the recovery process. There is substantial research that clearly indicates superior treatment outcomes for patients whose families are involved in the treatment process.

Education

The Matrix program was founded on the principle that scientific findings can be successfully presented to clients and their families. The Matrix Education Groups contain a unique set of lectures that explain to participants what happens when addiction occurs and how they can deal with the brain chemistry changes that are caused by the abuse of alcohol and drugs.

Continuing Care

Clients are encouraged to attend continuing care groups at Matrix for at least one year, although many choose to stay longer. Those individuals that stay connected by attending the continuing care groups have a better chance of achieving long-term recovery.

The Matrix approach allows for maximal utilization of effective outpatient treatment methods. Due to the extensive involvement of the Matrix staff with clinical research efforts, patients treated at the Matrix Institute have access to the newest and most effective pharmacotherapies and psychologically based treatment models. The substance abuse treatment system established by Matrix offers a set of options and a level of expertise unmatched in behavioral healthcare.

Publications (July 1, 2010, to June 30, 2012)

- Amato, L., Davoli, M., Vecchi, S., Ali, R., Farrell, M., Faggiano, F., Foxcroft, D., Ling, W., Minozzi, S., & Chengzheng, Z. (2011). Cochrane systematic reviews in the field of addiction: What's there and what should be. *Drug and Alcohol Dependence*, 113(2-3), 96-103. PMID: 20832954
- Anderson, A.L., Li, S.-H., Biswas, K., McSherry, F., Holmes, T., Iturriaga, E., Kahn, R., Chiang, N., Beresford, T., Campbell, J., Haning, W., Mawhinney, J., McCann, M., Rawson, R., Stock, C., Weis, D., Yu, E., & Elkashef, A.M. (2012). Modafinil for the treatment of methamphetamine dependence. *Drug and Alcohol Dependence*, 120(1-3), 135-141. PMID: 21840138
- Andrinopoulos, K., Clum, G., Murphy, D.A., Harper, G., Perez, L., Xu, J., Cunningham, S., & Ellen, J.M.; Adolescent Medicine Trials Network for HIV/AIDS Interventions. (2011). Health related quality of life and psychosocial correlates among HIV-infected adolescent and young adult women in the US. *AIDS Education and Prevention*, 23(4), 367-381. PMID: 21966746
- Back, S.E., Payne, R.L., Wahlquist, A.H., Carter, R.E., Stroud, Z., Haynes, L., Hillhouse, M., Brady, K.T., & Ling, W. (2011). Comparative profiles of men and women with opioid dependence: Results from a national multisite effectiveness trial. *American Journal of Drug and Alcohol Abuse*, 37(5), 313-323. PMID: 21854273
- Baser, O., Chalk, M., Rawson, R., & Gastfriend, D.R. (2011). Alcohol dependence treatments: Comprehensive healthcare costs, utilization outcomes, and pharmacotherapy persistence. *American Journal of Managed Care*, 17(Suppl. 8), S222-S234. PMID: 21761948
- Bowers, J.R., Branson, C.M., Fletcher, J., & Reback, C.J. (2011). Differences in substance use and sexual partnering between men who have sex with men, men who have sex with men and women and transgender women. *Culture, Health & Sexuality*, 13(6), 629-642. PMID: 21442499
- Brecht, M.-L., & Urada, D. (2011). Treatment outcomes for methamphetamine users: California Proposition 36 and comparison clients. *Journal of Psychoactive Drugs*, 43(Suppl. 1), 68-76. PMID: 22185041
- Burdon, W.M., St. De Lore, J., & Prendergast, M.L. (2011). Developing and implementing a positive behavioral reinforcement intervention in prison-based drug treatment: Project BRITE. *Journal of Psychoactive Drugs*, 43(Suppl. 1), 40-50. PMID: 22185038
- Cai, J.H., Song, X.Y., & Hser, Y.I. (2010). A Bayesian analysis of mixture structural equation models with non-ignorable missing responses and covariates. *Statistics in Medicine*, 29(18), 1861-1874. PMID: 20680980
- Chen, X., Murphy, D.A., Naar-King, S., & Parsons, J.T.; Adolescent Medicine Trials Network for HIV/AIDS Interventions. (2011). A clinic-based motivational intervention improves condom use among subgroups of youth living with HIV. *Journal of Adolescent Health*, 49(2), 193-198. PMID: 21783053
- Cochran, S.D., Grella, C.E., & Mays, V.M. (2012). Do substance use norms and perceived drug availability mediate sexual orientation differences in patterns of substance use? Results from the California Quality of Life Survey II. *Journal of Studies on Alcohol and Drugs*, 73(4), 675-685. PMID: 22630806
- Cohen, A.N., Glynn, S.M., Hamilton, A.B., & Young, A.S. (2010). Implementation of a family intervention for individuals with schizophrenia. *Journal of General Internal Medicine*, 25(Suppl. 1), 32-37. PMID: 20077149
- Compton, P., Canamar, C.P., Hillhouse, M., & Ling, W. (2012). Hyperalgesia in heroin dependent patients and the effects of opioid substitution therapy. *Journal of Pain*, 13(4), 401-409. PMID: 22424799

- Conner, B.T., Hampton, A.S., Hunter, J., & Urada, D. (2011). Treating opioid use under California's Proposition 36: Differential outcomes by treatment modality. *Journal of Psychoactive Drugs*, 43(Suppl. 1), 77-83. PMID: 22185042
- Crèvecoeur-MacPhail, D., Bellows, A., Rutkowski, B.A., Ransom, L., Myers, A.C., & Rawson, R.A. (2010). "I've been NIATxed": Participants' experience with process improvement. *Journal of Psychoactive Drugs, SARC Supplement 6*, 249-259. PMID: 21138201
- Crèvecoeur-MacPhail, D., Ransom, L., Myers, A.C., Annon, J.J., Diep, N., Gonzales, R., Rawson, R.A., Viemes, J., Jr., Sugita, W., & Barger, J. (2010). Inside the black box: Measuring addiction treatment services and their relation to outcomes. *Journal of Psychoactive Drugs, SARC Supplement 6*, 269-276. PMID: 21138203
- Davoudi, M., & Rawson, R.A. (2010). Screening, brief intervention, and referral to treatment (SBIRT) initiatives in California: Notable trends, challenges, and recommendations. *Journal of Psychoactive Drugs, SARC Supplement 6*, 239-248. PMID: 21138200
- Dickerson, D.L., & Johnson, C.L. (2011). Design of a behavioral health program for urban American Indian/Alaska Native youths: A community informed approach. *Journal of Psychoactive Drugs*, 43(4), 337-342.
- Dickerson, D.L., & Johnson, C.L. (2012). Mental health and substance abuse characteristics among a clinical sample of urban American Indian/Alaska native youths in a large California metropolitan area: A descriptive study. *Community Mental Health Journal*, 48(1), 56-62. PMID: 21161379
- Dickerson, D.L., Spear, S., Marinelli-Casey, P., Rawson, R., Li, L., & Hser, YI. (2011). American Indians/Alaska natives and substance abuse treatment outcomes: Positive signs and continuing challenges. *Journal of Addictive Diseases*, 30(1), 63-74. PMID: 21218312
- Dierst-Davies, R., Reback, C.J., Peck, J.A., Nuño, M., Kamien, J.B., & Amass, L. (2011). Delay-discounting among homeless, out-of-treatment, substance-dependent men who have sex with men. *American Journal of Drug and Alcohol Abuse*, 37(2), 93-97. PMID: 21128876
- Du, J., Lombardi, C., Evans, E., Jiang, H., Zhao, M., & Meng, Y.Y. (2012). A mixed methods approach to identifying factors related to voluntary HIV testing among injection drug users in Shanghai, China. *International Journal of Infectious Diseases*, 16(7), e498-e503. PMID: 22534473
- Evans, E., Anglin, M.D., Urada, D., & Yang, J. (2011). Promising practices for delivery of court-supervised substance abuse treatment: Perspectives from six high-performing California counties operating Proposition 36. *Evaluation and Program Planning*, 34, 124-134. PMID: 20965568.
- Evans, E., Grella, C.E., Murphy, D.A., & Hser, Y.I. (2010). Using administrative data for longitudinal substance abuse research. *Journal of Behavioral Health Services & Research*, 37(2), 252-271. PMID: 18679805
- Evans, E., Hser, Y.I., & Huang, D. (2010). Employment services utilization and outcomes among substance abusing offenders participating in California's Proposition 36 drug treatment initiative. *Journal of Behavioral Health Services & Research*, 37(4), 461-476. PMID: 19688598
- Evans, E., Huang, D., & Hser, Y.-I. (2011). High-risk offenders participating in court-supervised substance abuse treatment: Characteristics, treatment received, and factors associated with recidivism. *Journal of Behavioral Health Services & Research*, 38(4), 510-525. PMID: 21479770

Publications (July 1, 2010, to June 30, 2012)

- Evans, E., Jaffe, A., Urada, D., & Anglin, M.D. (2012). Differential outcomes of court-supervised substance abuse treatment among California parolees and probationers. *International Journal of Offender Therapy and Comparative Criminology*, 56(4), 539-556. PMID: 21518702
- Evans, E., Li, L., Urada, D., & Anglin, M.D. (2010). Comparative effectiveness of California's Proposition 36 and drug court programs before and after propensity score matching. *Crime & Delinquency*. Published online Oct. 1, 2010.
- Faivre, E., Hamilton, A., & Hölscher, C. (2012). Effects of acute and chronic administration of GIP analogues on cognition, synaptic plasticity and neurogenesis in mice. *European Journal of Pharmacology*, 674(2-3), 294-306. PMID: 22115896
- Farabee, D., Hawken, A., & Griffith, P. (2011). Tracking and incentivizing substance abusers in longitudinal research: Results of a survey of National Institute on Drug Abuse-funded investigators. *Journal of Addiction Medicine*, 5(2), 87-91. doi: 10.1097/ADM.0b013e3181e11740; PMID: 21769053
- Farabee, D., Zhang, S.X., & Wright, B. (2012). Managing an on-the-spot lottery in re-entry services. *Journal of Experimental Criminology*, 8(3), 241-253.
- Farabee, D., Zhang, S., & Yang, J. (2011). A preliminary examination of offender needs assessment: Are all those questions really necessary? *Journal of Psychoactive Drugs*, 43(Suppl. 1), 52-57. PMID: 22185039
- Fong, T.W., Campos, M.D., Brecht, M.L., Davis, A., Marco, A., Pecanha, V., & Rosenthal, R.J. (2011). Problem and pathological gambling in a sample of casino patrons. *Journal of Gambling Studies*, 27(1), 35-47. PMID: PMC3052467
- Friedmann, P.D., Green, T.C., Taxman, F.S., Harrington, M., Rhodes, A.G., Katz, E., O'Connell, D., Martin, S.S., Frisman, L.K., Litt, M., Burdon, W., Clarke, J.G., Fletcher, B.W.; for the Step'n Out Research Group of CJ-DATS. (2012). Collaborative behavioral management among parolees: Drug use, crime and re-arrest in the Step'n Out randomized trial. *Addiction*, 107(6), 1099-1108. PMID: 22175445
- Friedmann, P.D., Hoskinson, R., Gordon, M., Schwartz, R., Kinlock, T., Knight, K., Flynn, P.M., Welsh, W.N., Stein, L.A., Sacks, S., O'Connell, D.J., Knudsen, H.K., Shafer, M.S., Hall, E., Frisman, L.K.; MAT Working Group of CJ-DATS. (2012). Medication-assisted treatment in criminal justice agencies affiliated with the criminal justice-drug abuse treatment studies (CJ-DATS): Availability, barriers, and intentions. *Substance Abuse*, 33(1), 9-18. PMID: 22263709
- Gardiner, C., Urada, D., & Anglin, M.D. (2011). Band-aids and bullhorns: Why California's drug policy is failing and what we can do to fix it. *Criminal Justice Policy Review*, 23, 108-135. doi: 10.1177/0887403410397185
- Glasner-Edwards, S., Mooney, L.J., Marinelli-Casey, P., Hillhouse, M., Ang, A., & Rawson, R.A. (2011). Bulimia nervosa among methamphetamine dependent adults: Association with outcomes three years after treatment. *Eating Disorders*, 19(3), 259-269. PMID: 21516550
- Glasner-Edwards, S., Mooney, L.J., Marinelli-Casey, P., Hillhouse, M., Ang, A., & Rawson, R.; Methamphetamine Treatment Project Corporate Authors. (2010). Anxiety disorders among methamphetamine dependent adults: Association with post-treatment functioning. *American Journal on Addictions*, 19(5), 385-390. PMID: 20716300

- Glasner-Edwards, S., & Rawson, R. (2010). Evidence-based practices in addiction treatment: Review and recommendations for public policy. *Health Policy*, 97(2-3), 93-104. PMID: 20557970
- Gonzales, R., Ang, A., Glik, D.C., Rawson, R.A., Lee, S., & Iguchi, M.Y.; Methamphetamine Treatment Project Corporate Authors. (2011). Quality of life among treatment seeking methamphetamine-dependent individuals. *The American Journal on Addictions*, 20(4), 366-372. PMID: 21679268
- Gonzales, R., Anglin, M.D., Beattie, R., Ong, C.A., & Glik, D.C. (2012). Understanding recovery barriers: Youth perceptions about substance use relapse. *American Journal of Health Behavior*, 36(5), 602-614. PMID: 22584088.
- Gonzales, R., Brecht, M.-L., Mooney, L., & Rawson, R.A. (2011). Prescription and over-the-counter drug treatment admissions to the California public treatment system. *Journal of Substance Abuse Treatment*, 40(3), 224-229. PMID: 21193282
- Grella, C.E. (2012). Regular primary care and specialty care as needed is associated with remission from alcohol and drug use disorders over 9 years. *Evidence-Based Mental Health*, 15(2), 41. PMID: 22345099
- Grella, C.E., Cochran, S.D., Greenwell, L., & Mays, V.M. (2011). Effects of sexual orientation and gender on perceived need for treatment by persons with and without mental disorders. *Psychiatric Services*, 62(4), 404-410. PMID: 21459992
- Grella, C.E., & Lovinger, K. (2011). 30-year trajectories of heroin and other drug use among men and women sampled from methadone treatment in California. *Drug and Alcohol Dependence*, 118(2-3), 251-258. PMID: 21549528
- Grella, C.E., & Lovinger, K. (2012). Gender differences in physical and mental health outcomes among an aging cohort of individuals with a history of heroin dependence. *Addictive Behaviors*, 37(3), 306-312. PMID: 22154506
- Grella, C.E., & Rodriguez, L. (2011). Motivation for treatment among women offenders in prison-based treatment and longitudinal outcomes among those who participate in community aftercare. *Journal of Psychoactive Drugs*, 43(Suppl.1), 58-67. PMID: 22185040
- Grella, C.E., & Shi, Y. (2011). Stability of outcomes following residential drug treatment for patients with co-occurring disorders. *Journal of Dual Diagnosis*, 7(1-2), 103-112. PMID: 21804769
- Grella, C.E., Stein, J.A., Weisner, C., Chi, F., & Moos, R. (2010). Predictors of longitudinal substance use and mental health outcomes for patients in two integrated service delivery systems. *Drug and Alcohol Dependence*, 110(1-2), 92-100. PMID: 20338696
- Hamilton, A.B., Poza, I., Hines, V., & Washington, D. (2012). Barriers to psychosocial services among homeless women veterans. *Journal of Social Work Practice in the Addictions*, 12(1), 52-68.
- Hamilton, A.B., Poza, I., & Washington, D.L. (2011). "Homelessness and trauma go hand-in-hand": Pathways to homelessness among women veterans. *Women's Health Issues*, 21(4 Suppl), S203-S209. PMID:21724142
- Hampton, A.S., Conner, B.T., Albert, D., Anglin, M.D., Urada, D., & Longshore, D. (2011). Pathways to treatment retention for individuals legally coerced to substance use treatment: The interaction of hope and treatment motivation. *Drug and Alcohol Dependence*, 118(2-3), 400-407. PMID: 21632188

- Herbeck, D.M., Gonzales, R., & Rawson, R.A. (2010). Performance improvement in addiction treatment: Efforts in California. *Journal of Psychoactive Drugs, SARC Supplement 6*, 261-268. PMID: 21138202
- Heslin, K.C., Hamilton, A.B., Singzon, T.K., Smith, J.L., & Anderson, N.L.R. (2011). Alternative families in recovery: Fictive kin relationships among residents of sober living homes. *Qualitative Health Research, 21*(4), 477-488. PMID: 20952602, doi: 10.1177/1049732310385826
- Heslin, K.C., Singzon, T., Aimiuwu, O., Sheridan, D., & Hamilton A. (2012). From personal tragedy to personal challenge: Responses to stigma among sober living home residents and operators. *Sociology of Health & Illness, 34*(3), 379-395. PMID: 21707663, doi: 10.1111/j.1467-9566.2011.01376.x.
- Hillhouse, M., Canamar, C.P., Doraimani, G., Thomas, C., Hasson, A., & Ling W. (2011). Participant characteristics and buprenorphine dose. *American Journal of Drug and Alcohol Abuse, 37*(5), 453-459. PMID: 21854290
- Hser, Y., & Anglin, M.D. (2011). Addiction treatment and recovery careers. In J.F. Kelly & W.L. White (Eds.), *Addiction recovery management: Theory, research, and practice* (pp. 9-29). New York: Springer Science.
- Hser, Y., Du, J., Li, J., Zhao, M., Chang, Y.J., Peng, C.Y., & Evans, E. (2012). Hepatitis C among methadone maintenance treatment patients in Shanghai and Kunming, China. *Journal of Public Health, 34*(1), 24-31. PMID: 22138488
- Hser, Y.-I., Evans, E., Huang, D., & Messina, N. (2011). Long-term outcomes among drug-dependent mothers treated in women-only versus mixed-gender programs. *Journal of Substance Abuse Treatment, 41*(2), 115-123. PMID: 21466942
- Hser, Y.I., Fu, L., Wu, F., Du, J., & Zhao, M. (2013). Pilot trial of a recovery management intervention for heroin addicts released from compulsory rehabilitation in China. *Journal of Substance Abuse Treatment, 44*(1), 78-83. PMID: 22520276.
- Hser, Y.I., Hunt, S.A., Evans, E., Chang, Y.J., & Messina, N.P. (2012). Hispanic parenting women in women-only versus mixed-gender drug treatment: A 10-year prospective study. *Addictive Behaviors, 37*(6), 729-735. PMID: 22398357
- Hser, Y.I., Kagihara J., Huang D., Evans, E., & Messina, N. (2012). Mortality among substance-abusing mothers in California: A 10-year prospective study. *Addiction, 107*(1), 215-222. PMID: 21831178
- Hser, Y.I., Li, J., Jiang, H., Zhang, R., Du, J., Zhang, C., Zhang, B., Evans, E., Wu, F., Chang, Y.J., Peng, C., Huang, D., Stitzer, M.L., Roll, J., & Zhao, M. (2011). Effects of a randomized contingency management intervention on opiate abstinence and retention in methadone maintenance treatment in China. *Addiction, 106*(10), 1801-1809. PMID: 21793958
- Huang, D.Y.C., Evans, E., Hara, M., Weiss, R.E., & Hser, Y.-I. (2011). Employment trajectories: Exploring gender differences and impacts of drug use. *Journal of Vocational Behavior, 79*(1), 277-289. doi:10.1016/j.jvb.2010.12.001
- Huang, D.Y., Murphy, D.A., & Hser, Y.I. (2011). Parental monitoring during early adolescence deters adolescent sexual initiation: Discrete-time survival mixture analysis. *Journal of Child and Family Studies, 20*(4), 511-520. PMID: 21836663

- Humeniuk, R., Ali, R., Babor, T., Souza-Formigoni, M.L., de Lacerda, R.B., Ling, W., McRee, B., Newcombe, D., Pal, H., Poznyak, V., Simon, S., & Vendetti, J. (2012). A randomized controlled trial of a brief intervention for illicit drugs linked to the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) in clients recruited from primary health-care settings in four countries. *Addiction*, *107*(5), 957-966. PMID: 22126102
- Jaffe, A., Du, J., Huang, D., & Hser, Y.I. (2012). Drug-abusing offenders with comorbid mental disorders: Problem severity, treatment participation, and recidivism. *Journal of Substance Abuse Treatment*, *43*, 244-250. PMID: 22305234
- Joe, G.W., Knight, K., Simpson, D.D., Flynn, P.M., Morey, J.T., Bartholomew, N.G., Tindall, M.S., Burdon, W.M., Hall, E.A., Martin, S.S., & O'Connell, D.J. (2012). An evaluation of six brief interventions that target drug-related problems in correctional populations. *Journal of Offender Rehabilitation*, *51*(1-2), 9-33. PMID: 22547911
- Karno, M.P., Longabaugh, R., & Herbeck, D. (2010). What explains the relationship between the therapist structure \times patient reactance interaction and drinking outcome? An examination of potential mediators. *Psychology of Addictive Behaviors*, *24*(4), 600-607. PMID: 21038931
- Kennedy, D.P., Cowgill, B.O., Bogart, L.M., Corona, R., Ryan, G.W., Murphy, D.A., Nguyen, T., & Schuster, M.A. (2010). Parents' disclosure of their HIV infection to their children in the context of the family. *AIDS and Behavior*, *14*(5), 1095-1105. PMID: PMC2936671
- Kepple, N.J., & Freisthler, B. (2012) Exploring the ecological association between crime and medical marijuana dispensaries. *Journal of Studies on Alcohol and Drugs*, *73*(4), 523-530. PMID: 22630790
- Krupitsky, E., Nunes, E.V., Ling, W., Illeperuma, A., Gastfriend, D.R., & Silverman, B.L. (2011). Injectable extended-release naltrexone for opioid dependence: A double-blind, placebo-controlled, multicentre randomised trial. *Lancet*, *377*(9776), 1506-1513. Comment in *Lancet*, 2011;377(9776), 1468-1470. Comment in *Lancet*, 2011;378(9792), 663; authors' reply 663-664. PMID: 21529928 and 21856477
- Landovitz, R.J., Fletcher, J.B., Inzhakova, G., Lake, J.E., Shoptaw, S., & Reback, C.J. (2012). A novel combination HIV prevention strategy: Post-exposure prophylaxis with contingency management for substance abuse treatment among methamphetamine-using men who have sex with men. *AIDS Patient Care and STDS*, *26*(6), 320-328. PMID: 22680280
- Lin, J.C., Karno, M.P., Grella, C.E., Warda, U., Liao, D.H., Hu, P., & Moore, A.A. (2011). Alcohol, tobacco, and nonmedical drug use disorders in U.S. adults aged 65 years and older: Data from the 2001-2002 National Epidemiologic Survey of Alcohol and Related Conditions. *American Journal of Geriatric Psychiatry*, *19*(3), 292-299. PMID: 20808122
- Ling, W. (2011). DSM-V: Time for change. *Addiction*, *106*(5), 872-873. PMID: 21477229
- Ling, W., Casadonte, P., Bigelow, G., Kampman, K.M., Patkar, A., Bailey, G.L., Rosenthal, R.N., & Beebe, K.L. (2010). Buprenorphine implants for treatment of opioid dependence: A randomized controlled trial. *JAMA*, *304*(14), 1576-1583. PMID: 20940383
- Ling, W., Hillhouse, M., Jenkins, J., Miotto, K., Torrington, M., & Chapleo, C. (2012). Comparisons of analgesic potency and side effects of buprenorphine and buprenorphine with ultra-low-dose naloxone. *Journal of Addiction Medicine*, *6*(2), 118-123. PMID: 22475985

Publications (July 1, 2010, to June 30, 2012)

- Ling, W., Mooney, L., & Hillhouse, M. (2011). Prescription opioid abuse, pain and addiction: Clinical issues and implications. *Drug and Alcohol Review, 30*(3), 300-305. PMID: 21545561
- Ling, W., Mooney, L., & Wu, L.T. (2012) Advances in opioid antagonist treatment for opioid addiction. *Psychiatric Clinics of North America, 35*(2), 297-308. PMID: 22640757
- Ling, W., Shoptaw, S., Hillhouse, M., Bholat, M.A., Charuvastra, C., Heinzerling, K., Chim, D., Annon, J., Dowling, P.T., & Doraimani, G. (2012). Double-blind placebo-controlled evaluation of the PROMETA™ protocol for methamphetamine dependence. *Addiction, 107*(2), 361-369. PMID: 22082089
- Macdonell, K.E., Naar-King, S., Murphy, D.A., Parsons, J.T., & Harper, G.W. (2010). Predictors of medication adherence in high risk youth of color living with HIV. *Journal of Pediatric Psychology, 35*(6), 593-601. PMID: PMC2889251
- Macdonell, K.E., Naar-King, S., Murphy, D.A., Parsons, J.T., & Huszti, H. (2011). Situational temptation for HIV medication adherence in high-risk youth. *AIDS Patient Care and STDS, 25*(1), 47-52. PMID: 21162691
- MacGregor, C., Hamilton, A.B., Oishi, S.M., & Yano, E.M. (2011). Description, development, and philosophies of mental health service delivery for female veterans in the VA: A qualitative study. *Women's Health Issues, 21*(4 Suppl), S138-S144. PMID: 21724133
- Marelich, W.D., Murphy, D.A., Payne, D.L., Herbeck, D.M., & Schuster, M.A. (2012). Self-competence among early and middle adolescents affected by maternal HIV/AIDS. *International Journal of Adolescence and Youth, 17*(1), 21-33. PMID: 22485061
- Maxwell, J.C., & Brecht, M.L. (2011). Methamphetamine: Here we go again? *Addictive Behaviors, 36*(12), 1168-1173. PMID: 21875772
- Miotto, K., Hillhouse, M., Donovan, R., Cunningham-Rathner, J., Charuvastra, C., Torrington, M., Esagoff, A.E., & Ling, W. (2012). Comparison of buprenorphine treatment for opioid dependence in 3 settings. *Journal of Addiction Medicine, 6*(1), 68-76. PMID: 22105061
- Murphy, D.A., Armistead, L., Marelich, W.D., Payne, D.L., & Herbeck, D.M. (2011). Pilot trial of a disclosure intervention for HIV+ mothers: The TRACK program. *Journal of Consulting and Clinical Psychology, 79*(2), 203-214. PMID: 21355637
- Murphy, D.A., Brecht, M.-L., Huang, D., & Herbeck, D.M. (2012). Trajectories of delinquency from age 14 to 23 in the National Longitudinal Survey of Youth sample. *International Journal of Adolescence and Youth, 17*(1), 47-62.
- Murphy, D.A., Chen, X., Naar-King, S., & Parsons, J.T.; Adolescent Trials Network. (2012). Alcohol and marijuana use outcomes in the Healthy Choices motivational interviewing intervention for HIV-positive youth. *AIDS Patient Care and STDs, 26*(2), 95-100. PMID: 22191456
- Murphy, D.A., Herbeck, D.M., Marelich, W.D., & Schuster, M.A. (2010). Predictors of sexual behavior among early and middle adolescents affected by maternal HIV. *International Journal of Sexual Health, 22*, 195-204. PMID: 21998620
- Murphy, D.A., Hser, Y.-I., Huang, D., Brecht, M.-L., & Herbeck, D.M. (2010). Self-report of longitudinal substance use: A comparison of the UCLA Natural History Interview and the Addiction Severity Index. *Journal of Drug Issues, 40*(2), 495-515. PMID: PMC3013623

- Murphy, D.A., Marelich, W.D., Armistead, L., Herbeck, D.M., & Payne, D.L. (2010). Anxiety/stress among mothers living with HIV: Effects on parenting skills and child outcomes. *AIDS Care*, 22(12), 1449-1458. PMID: 20824552.
- Murphy, D.A., Roberts, K.J., & Herbeck, D.M. (2011). HIV disease impact on mothers: What they miss during their children's developmental years. *Journal of Child and Family Studies*, 20(3), 361-369. PMID: 21637348
- Murphy, D.A., Roberts, K.J., & Herbeck, D.M. (2012). HIV-positive mothers' communication about safer sex and STD prevention with their children. *Journal of Family Issues*, 33(2), 136-157. PMID: 22368316
- Murphy, D.A., Roberts, K.J., & Herbeck, D.M. (2012). HIV-positive mothers with late adolescent/early adult children: "Empty nest" concerns. *Health Care for Women International*, 33(4), 387-402. PMID: 22420679
- Murphy, D.A., Shetty, V., Herbeck, D.M., Der-Martirosian, C., Urata, M., & Yamashita, D.-D. (2010). Adolescent orofacial injury: Association with psychological symptoms. *Psychology, Health & Medicine*, 15(5), 574-583. PMID: 20835967
- Nedjat-Haiem, F.R., Lorenz, K.A., Eil, K., Hamilton, A., & Pallinkas, L. (2012). Experiences with advanced cancer among Latinas in a public health care system. *Journal of Pain and Symptom Management*, 43(6), 1013-1024. PMID: 22575719
- Nielsen, S., Hillhouse, M., Mooney, L., Fahey, J., & Ling, W. (2012). Comparing buprenorphine induction experience with heroin and prescription opioid users. *Journal of Substance Abuse Treatment*, 43(3), 285-290. PMID: 22301084
- Niv, N., Cohen, A.N., Hamilton, A., Reist, C., & Young, A.S. (2012). Effectiveness of a psychosocial weight management program for individuals with schizophrenia. *Journal of Behavioral Health Services & Research*, March 20. [Epub ahead of print] PMID: 22430566
- Niv, N., Shatkin, J.P., Hamilton, A.B., Unützer, J., Klap, R., & Young, A.S. (2010). The use of herbal medications and dietary supplements by people with mental illness. *Community Mental Health Journal*, 46(6), 563-569. PMID: 19688594
- Nosyk, B., Sun, H., Evans, E., Marsh, D.C., Anglin, M.D., Hser, Y.I., & Anis, A.H. (2012). Defining dosing pattern characteristics of successful tapers following methadone maintenance treatment: Results from a population-based retrospective cohort study. *Addiction*, 107, 1621-1629. PMID: 22385013
- Nyamathi, A., Leake, B., Albarran, C., Zhang, S., Hall, E., Farabee, D., Marlow, E., Marfisee, M., Khalilifard, F., & Faucette, M. (2011). Correlates of depressive symptoms among homeless men on parole. *Issues in Mental Health Nursing*, 32(8), 501-511. PMID: 21767252
- Ober, A.J., Iguchi, M.Y., Weiss, R.E., Gorbach, P.M., Heimer, R., Ouellet, L.J., Shoptaw, S., Anglin, M.D., & Zule, W.A. (2011). The relative role of perceived partner risks in promoting condom use in a three-city sample of high-risk, low-income women. *AIDS and Behavior*, 15, 1347-1358. PMID: 20976538
- Pearson, F.S., Prendergast, M.L., Podus, D., Vazan, P., Greenwell, L., & Hamilton, Z. (2012). Meta-analyses of seven of the National Institute on Drug Abuse's principles of drug addiction treatment. *Journal of Substance Abuse Treatment*, 43(1), 1-11. PMID: 22119178

- Peng, E.Y., Yeh, C.Y., Lyu, S.Y., Morisky, D.E., Chen, Y.M., Lee, M.B., Farabee, D., & Malow, R.M. (2010). Prevalence and correlates of lifetime suicidal ideation among HIV-infected male inmates in Taiwan. *AIDS Care*, 22(10), 1212-20. PMID: 20845113
- Pilowsky, D.J., Wu, L.T., Burchett, B., Blazer, D.G., & Ling, W. (2011). Depressive symptoms, substance use, and HIV-related high-risk behaviors among opioid-dependent individuals: Results from the Clinical Trials Network. *Substance Use and Misuse*, 46(14), 1716-1725. PMID: 21973307
- Pilowsky, D.J., Wu, L.T., Burchett, B., Blazer, D.G., Woody, G.E., & Ling, W. (2011). Co-occurring amphetamine use and associated medical and psychiatric comorbidity among opioid-dependent adults: Results from the Clinical Trials Network. *Substance Abuse and Rehabilitation*, 2, 133-144. PMCID: PMC3163455
- Prendergast, M.L. (2011). Issues in defining and applying evidence-based practices criteria for treatment of criminal-justice involved clients. *Journal of Psychoactive Drugs*, 43(Suppl. 1), 10-18. PMID: 22185035
- Prendergast, M.L., Messina, N.P., Hall, E.A., & Warda, U.S. (2011). The relative effectiveness of women-only and mixed-gender treatment for substance-abusing women. *Journal of Substance Abuse Treatment*, 40(4), 336-348. PMID: 21315540
- Raisch, D.W., Campbell, H.M., Garnand, D.A., Jones, M.A., Sather, M.R., Naik, R., & Ling, W. (2012). Health-related quality of life changes associated with buprenorphine treatment for opioid dependence. *Quality of Life Research*, 21(7), 1177-1183. PMID: 21987030
- Rawson, R.A. (2011, September). Building an addiction workforce in the Middle East: A counselor training program partnership between Kasr Al-Ainy and UCLA. In *Public Health in the Middle East: Building a Healthy Future* (pp. 21-25). Washington, DC: Middle East Institute.
- Rawson, R.A., & Gonzales, R. (2010). Commentary on Marshall et al. (2010): Are long-term negative health consequences of methamphetamine use important to youth? *Addiction*, 105(6), 1003-1004. PMID: 20659060
- Rawson, R.A., Gonzales, R., Crèvecoeur-MacPhail, D., Urada, D., Brecht, M.-L., Chalk, M., Kemp, J., & Cunningham, M. (2010). Improving the accountability of California's public substance abuse treatment system through the implementation of performance models. *Journal of Psychoactive Drugs, SARC Supplement 6*, 211-214.
- Rawson, R.A., Gonzales, R.G., & Ling, W. (2011). Clinical aspects of methamphetamine. In B.A. Johnson (Ed.), *Addiction medicine: Science and Practice* (Vol. 1, pp. 495-510). New York: Springer.
- Reback, C.J., Grant, D.L., Fletcher, J.B., Branson, C.M., Shoptaw, S., Bowers, J.R., Charania, M., & Mansergh, G. (2012). Text messaging reduces HIV risk behaviors among methamphetamine-using men who have sex with men. *AIDS and Behavior*, 16(7), 1993-2002. PMID: 22610370. Erratum – 16(7), 2003. PMID: 22767028
- Reback, C.J., & Larkins, S. (2012). HIV risk behaviors among a sample of heterosexually identified men who occasionally have sex with another male and/or a transwoman. *Journal of Sex Research*. 2011 Dec 29. [Epub ahead of print] PMID: 22206223

- Reback, C.J., Ling, D., Shoptaw, S., & Rohde, J. (2010). Developing a text messaging risk reduction intervention for methamphetamine-using MSM: Research note. *Open AIDS Journal*, 14(4), 116-122. PMC2905770
- Reback, C.J., Peck, J.A., Dierst-Davies, R., Nuno, M., Kamien, J.B., & Amass, L. (2010). Contingency management among homeless, out-of-treatment men who have sex with men. *Journal of Substance Abuse Treatment*, 39(3), 255-263. PMID: 20667681
- Reback, C.J., & Shoptaw S. (2012). Development of an evidence-based, gay-specific cognitive behavioral therapy intervention for methamphetamine-abusing gay and bisexual men. *Addictive Behaviors*. 2011 Nov. 26, 2011. [Epub ahead of print] PMID: 22169619
- Reback, C.J., Shoptaw, S., & Downing, M.J. (2012). Prevention case management improves socioeconomic standing and reduces symptoms of psychological and emotional distress among transgender women. *AIDS Care*, 24(9), 1136-1144. PMID: 22670654
- Rieckmann, T., Kovas, A.E., & Rutkowski, B.A. (2010). Adoption of medications in substance abuse treatment: Priorities and strategies of Single State Authorities. *Journal of Psychoactive Drugs, SARC Supplement*, 227-238. PMID: 21138199
- Rutkowski, B.A., Gallon, S., Rawson, R.A., Freese, T.E., Bruehl, A., Crèvecoeur-Macphail, D., Sugita, W., Molfenter, T., & Cotter, F. (2010). Improving client engagement and retention in treatment: The Los Angeles County experience. *Journal of Substance Abuse Treatment*, 39, 78-86. PMID: 20409672
- Rutkowski, B.A., Rawson, R.A., & Freese, T.E. (2010). Editors' introduction: Improving the addiction treatment system in California through the use of data and evidence-based practices – California Substance Abuse Research Consortium (SARC) meetings, 2009. *Journal of Psychoactive Drugs, SARC Supplement 6*, 207-210. PMID: 21138196
- Shetty, V., Murphy, D.A., Zigler, C., Yamashita, D.D., & Belin, T.R. (2011). Randomized controlled trial of personalized motivational interventions in substance using patients with facial injuries. *Journal of Oral and Maxillofacial Surgery*, 69(9), 2396-2411. PMID: PMC3163019
- Sodano, R., Watson, D.W., Rataemane, S., Rataemane, L., Ntlhe, N., & Rawson, R. (2010). The substance abuse treatment workforce of South Africa. *International Journal of Mental Health and Addiction*, 8(4), 608-615. PMID: PMC2965395
- Soyka, M., Kranzler, H.R., van den Brink, W., Krystal, J., Möller, H.J., & Kasper, S.; WFSBP Task Force on Treatment, Guidelines for Substance Use Disorders. Collaborators: Kranzler, H.R., Berglund, M., Lingford-Hughes, A., Soyka, M., Möller, H.J., Belfort, E., Choi, I.G., Frey, R., Gastpar, M., Gorelick, D.A., Heinze, G.M., Hesselbrock, V., Kosten, T., Lehert, P., Lejoyeux, M., Ling, W., Mendoza, C., Musalek, M., Saito, T., Srisurapanont, M., Ujike, H., & Wittchen, U. (2011). The World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for the biological treatment of substance use and related disorders. Part 2: Opioid dependence. *World Journal of Biological Psychiatry*, 12(3), 160-187. PMID: 21486104
- Staton-Tindall, M., Frisman, L., Lin, H.J., Leukefeld, C., Oser, C., Havens, J.R., Prendergast, M., Surratt, H.L., & Clarke, J. (2011). Relationship influence and health risk behavior among re-entering women offenders. *Women's Health Issues*, 21(3), 230-238. PMID: 21315617

Publications (July 1, 2010, to June 30, 2012)

- Stein, J.A., Grella, C.E., Conner, B.T., & Gelberg, L. (2012). Addiction syndrome and homelessness. In H. J. Shaffer, D.A., LaPlante, & S.E. Nelson (Eds.), *APA addiction syndrome handbook: Vol. 2: Recovery, prevention, and other issues* (pp.457–471). Washington, DC: American Psychological Association.
- Stein, J.A., Zane, J.I., & Grella, C.E. (2012). Impact of abstinence self-efficacy and treatment services on physical health-related behaviors and problems among dually diagnosed patients. *Journal of Dual Diagnosis, 8*(1), 64-73. PMID: 22707922
- Steinberg, J.K., Grella, C.E., Boudov, M.R., Kerndt, P.R., & Kadrnka, C.M. (2011). Methamphetamine use and high-risk sexual behaviors among incarcerated female adolescents with a diagnosed STD. *Journal of Urban Health, 88*(2), 352-364. PMID:21394658
- Teruya, C., & Hser, Y.-I. (2010). Turning points in the life course: Current findings and future directions in drug use research. *Current Drug Abuse Reviews, 3*(3), 189-195. PMID:20298174
- Teruya, C., Longshore, D., Andersen, R.M., Arangua, L., Nyamathi, A., Leake, B., & Gelberg, L. (2010). Health and health care disparities among homeless women. *Women & Health, 50*(8), 719-736. PMID: 21170815
- Tomás-Rosselló, J., Rawson, R.A., Zarza, M.J., Bellows, A., Busse, A., Saenz, E., Freese, T., Shawkey, M., Carise, D., Ali, R., & Ling, W. (2010). United Nations Office on Drugs and Crime International Network of Drug Dependence Treatment and Rehabilitation Resources Centres: Treatnet. *Substance Abuse, 31*, 251-263. PMID: 21038179
- Urada, D., Gardiner, C., & Anglin, M.D. (2011). Stakeholder consensus and circumvention in drug diversion programs: Findings from California's Substance Abuse and Crime Prevention Act (Proposition 36). *Journal of Drug Issues, 41*(1), 45-68.
- Urada, D., Rutkowski, B.A., Rawson, R.A., & Freese, T.E. (2011). Editors' introduction: Identifying and assessing promising practices for criminal justice clients—California Substance Abuse Research Consortium (SARC) meetings, 2010. *Journal of Psychoactive Drugs, 43*(Suppl. 1), 3-9. PMID: 22185034
- Weiss, R.D., Potter, J.S., Fiellin, D.A., Byrne, M., Connery, H.S., Dickinson, W., Gardin, J., Griffin, M.L., Gourevitch, M.N., Haller, D.L., Hasson, A.L., Huang, Z., Jacobs, P., Kosinski, A.S., Lindblad, R., McCance-Katz, E.F., Provost, S.E., Selzer, J., Somoza, E.C., Sonne, S.C., & Ling, W. (2011). Adjunctive counseling during brief and extended buprenorphine-naloxone treatment for prescription opioid dependence: A 2-phase randomized controlled trial. *Archives of General Psychiatry, 68*(12), 1238-1246. PMID: 22065255
- Weiss, R.D., Potter, J.S., Provost, S.E., Huang, Z., Jacobs, P., Hasson, A., Lindblad, R., Connery, H.S., Prather, K., & Ling, W. (2010). A multi-site, two-phase, Prescription Opioid Addiction Treatment Study (POATS): Rationale, design, and methodology. *Contemporary Clinical Trials, 31*(2), 189-199. PMID: 20116457
- Wexler, H., & Prendergast, M. (2010). Therapeutic communities in United States prisons: Effectiveness and challenges. *Therapeutic Communities, 31*(2), 157-175.
- Wu, L.T., Blazer, D.G., Woody, G.E., Burchett, B., Yang, C., Pan, J.J., & Ling, W. (2012). Alcohol and drug dependence symptom items as brief screeners for substance use disorders: Results from the Clinical Trials Network. *Journal of Psychiatric Research, 46*(3), 360-369. PMID: 22204775
- Wu, F., & Hser, Y. (2011). Workforce professionalism in drug treatment services: Impact of California's Proposition 36. *Journal of Substance Abuse Treatment, 40*(1), 44-55. PMCID: PMC3206790

- Wu, L.T., Ling, W., Burchett, B., Blazer, D.G., Shostak, J., & Woody, G.E. (2010). Gender and racial/ethnic differences in addiction severity, HIV risk, and quality of life among opioid-dependent patients: Results from the Clinical Trials Network. *Substance Abuse and Rehabilitation, 1*, 13-22.
- Wu, L.T., Ling, W., Burchett, B., Blazer, D.G., Yang, C., Pan, J.J., Reeve, B.B., & Woody, G.E. (2011). Use of item response theory and latent class analysis to link poly-substance use disorders with addiction severity, HIV risk, and quality of life among opioid-dependent patients in the Clinical Trials Network. *Drug and Alcohol Dependence, 118*(2-3), 186-193. PMID: 21501933
- Wyatt, G.E., Hamilton, A.B., Myers, H.F., Ullman, J.B., Chin, D., Sumner, L.A., Loeb, T.B., Carmona, J.V., Zhang, M., & Liu, H. (2011). Violence prevention among HIV-positive women with histories of violence: Healing women in their communities. *Women's Health Issues, 21*(Suppl. 6), S255-S260. PMID: 22055676
- Xu, Y., Okuda, M., Hser, Y.I., Hasin, D., Liu, S.M., Grant, B.F., & Blanco, C. (2011). Twelve-month prevalence of psychiatric disorders and treatment-seeking among Asian Americans/Pacific Islanders in the United States: Results from the National Epidemiological Survey on Alcohol and Related Conditions. *Journal of Psychiatric Research, 45*(7), 910-918. PMID: 21238989
- Zhao, M., & Ling, W. (2012). HIV/AIDS and drug use in China - Interactions, impacts, and issues. *Substance Use & Misuse, 47*(8-9), 1015-1025. PMID: 22676569
- Zorick, T., Nestor, L., Miotto, K., Sugar, C., Hellemann, G., Scanlon, G., Rawson, R., & London, E.D. (2010). Withdrawal symptoms in abstinent methamphetamine-dependent subjects. *Addiction, 105*(10), 1809-1818. PMID: 20840201

Principal Investigators

M. Douglas Anglin (Ph.D.; Social Psychology, UCLA, 1980) was the Founding Director of the UCLA Drug Abuse Research Center (1984-1997) and was an Associate Director of the Integrated Substance Abuse Programs (ISAP) from 1998 to 2010. He is currently a Senior Advisor in the Department of Psychiatry and Biobehavioral Sciences. Dr. Anglin has been conducting research on substance abuse epidemiology, etiology, treatment evaluation, and social policy since 1972. He has been Principal Investigator on more than 25 federally funded research studies and on numerous state- and foundation-supported projects. He has been the author or co-author of more than 225 published articles. Dr. Anglin has served as an advisor to many national treatment evaluation studies, including the Drug Abuse Treatment Outcome Study and the Federal Bureau of Prisons Drug Programs Evaluation Project. He has also served as consultant to the following agencies: National Institute on Drug Abuse, Office of National Drug Control Policy, Center for Substance Abuse Treatment, National Academy of Sciences Institute of Medicine, National Institute of Justice, California Youth Authority and Departments of Alcohol and Drug Programs and Corrections, and Los Angeles County Alcohol and Drug Program Administration. doug_anglin@hotmail.com

Mary-Lynn Brecht, Ph.D., Research Statistician. Dr. Brecht is a researcher and statistical support specialist for the UCLA Integrated Substance Abuse Programs. She is currently conducting a long-term follow-up of methamphetamine users to study use and recovery trajectories. Topics of recent projects have included HIV risk behaviors among methamphetamine users, long-term outcomes of treatment for methamphetamine use, and needs assessment among service providers for technical assistance and training related to problem gambling. She also directs the Statistical Support core for the ISAP Center for Advancing Longitudinal Drug Abuse Research. She has had extensive training and experience in the development/adaptation, application, and integration of quantitative research methodologies, particularly those for longitudinal analyses, with emphasis in the areas of drug-abuse, health systems, and treatment evaluation research. lbrecht@ucla.edu

William Burdon, Ph.D., has been with ISAP for 15 years. He is the Principal Investigator of two NIDA-funded studies: a 4-year NIDA-funded study that will test the impact of a behavioral reinforcement intervention on inmate engagement in prison-based substance abuse treatment and assess the process by which this evidence-based innovation is implemented and sustained within prison-based treatment programs, and a 5-year study that will test the differential clinical- and cost-effectiveness of long-term residential versus intensive outpatient prison-based substance abuse treatment. He is also Co-Investigator at the Pacific Coast Research Center of NIDA's Criminal Justice Drug Abuse Treatment Studies 2 (CJ-DATS 2) collaborative. He was previously the Project Director of two multi-site evaluation studies of prison-based therapeutic community substance abuse treatment programs (1998-2004), funded by the California Department of Corrections (CDC). Dr. Burdon's areas of expertise include substance abuse treatment and corrections policy, contingency management in substance abuse treatment settings, sex offender treatment, and HIV/AIDS among incarcerated and post-incarcerated populations, and he is experienced in both quantitative and qualitative research methodologies. Dr. Burdon has authored publications on prison-based substance abuse treatment, contingency management, sanctions and incentives in prison-based substance abuse treatment programs, and organizational and systems aspects of substance abuse treatment with criminal justice populations and within correctional settings. wburdon@ucla.edu

Desirée Crèvecoeur-MacPhail, Ph.D., received her doctorate from Claremont Graduate University in Social Psychology and a master's degree in clinical psychology from Pepperdine University. Throughout her work at UCLA ISAP she has been responsible for examining engagement, retention, and client outcomes, and she has designed research reports that have assisted the county in performance management. As Principal Investigator of the Los Angeles County Evaluation System (LACES), she has implemented and assessed small pilot projects that have helped move the county closer to a performance-based management system. Her involvement with treatment providers benefited the study, as she served as a critical liaison to the treatment community. In addition, she has designed and implemented evaluation programs; supervised staff; addressed all correspondence from county commissions and external sources; coordinated and chaired meetings with county and state officials, treatment providers, and other stakeholders; composed reports, articles, and newsletters, and conducted literature searches. desireec@ucla.edu

Daniel Dickerson, D.O., M.P.H., is a double board-certified psychiatrist and addiction psychiatrist and an Assistant Research Psychiatrist at the Integrated Substance Abuse Programs (ISAP) at the University of California, Los Angeles. He has been affiliated with ISAP since 2007. Dr. Dickerson's research interests focus on substance abuse among American Indians/Alaska Natives (AI/ANs) and in developing culturally tailored substance abuse treatments for AIs/ANs. His research interests also include community-based participatory research and translating his research findings to the broader community. He is the Principal Investigator on a National Institutes of Health (NIH)/National Center for Complementary and Alternative Medicine (NCCAM)-funded R-21 study, "Drum-Assisted Recovery Therapy for Native Americans (DARTNA)." This study focuses on the final development of a culturally relevant treatment approach utilizing drumming and a follow-up pilot study of this treatment protocol. Dr. Dickerson has authored publications on the substance abuse treatment outcomes among AIs/ANs, substance abuse patterns among at-risk AIs/ANs, mental health and

substance abuse characteristics among urban AI/AN youths, and development of culturally appropriate psychiatric and substance abuse treatment programs for urban AI/AN youths. He is also the author on the chapter “American Indians/ Alaska Natives” in the 5th edition of Lowinson and Ruiz’s *Substance Abuse: A Comprehensive Textbook*. *daniel_dickerson@ucla.edu*

David Farabee, Ph.D., is Professor-in-Residence of Psychiatry and Biobehavioral Sciences at the University of California, Los Angeles, and a Principal Investigator at the Integrated Substance Abuse Programs (ISAP). Prior to this, he served as lead analyst for criminal justice research at the Texas Commission on Alcohol and Drug Abuse (1992-1995), and as Assistant Professor of Psychiatry and Research Scientist at the University of Kentucky Center on Drug and Alcohol Research (1995-1997). Dr. Farabee has published in the areas of substance abuse, adult and juvenile crime, HIV/AIDS, and offender treatment, was co-editor of the books *Treatment of Drug Offenders* (2002; New York: Springer) and *Treating Addicted Offenders: A Continuum of Effective Practices, Volumes I and II* (2004, 2007; New York: Civic Research Institute), author of, *Rethinking Rehabilitation: Why Can’t We Reform Our Criminals?* (2005; Washington, D.C.: AEI Press), and is co-editor of the *Offender Programs Report*. *dfarabee@ucla.edu*

Thomas E. Freese, Ph.D. (Clinical Psychology, California School of Professional Psychology, 1995), is currently the Director of Training for UCLA ISAP and the Principal Investigator and Director of the Pacific Southwest Addiction Technology Transfer Center (PSATTC). Dr. Freese has served as Principal Investigator on projects funded by the California Department of Alcohol and Drug Programs to train providers to implement Screening, Brief Intervention, and Referral to Treatment (SBIRT). Dr. Freese has also led several large projects that assist providers in implementing integrated treatment for co-occurring mental health and substance use disorders. He has been a featured presenter at conferences and meetings nationally and internationally on the impact and treatment of methamphetamine and opioid dependence. In addition, Dr. Freese has served as the Project Director on a number of studies including research on methamphetamine use. He has worked in the addiction field since 1983 and has developed and conducted trainings in 45 states and internationally, providing training and workshops for clinicians-in-training at the all levels. *tefreese@ix.netcom.com*

Suzette Glasner-Edwards, Ph.D., is a licensed clinical psychologist and a Principal Investigator at UCLA Integrated Substance Abuse Programs. She earned her B.A. in psychology from UCLA and her Ph.D. in psychology at the University of Minnesota. Subsequently, she completed her postdoctoral training at UCSD and the San Diego VA in the study and practice of psychotherapy for addictions. Dr. Glasner-Edwards has extensive clinical and research background in the use of cognitive-behavioral, motivational, and mindfulness-based interventions for adults who have substance use disorders with and without concurrent mental illness. Dr. Glasner-Edwards teaches these therapy techniques to psychiatry residents and psychologists in postdoctoral trainings at UCLA. A recipient of a career development award from NIDA, Dr. Glasner-Edwards’ current research focuses on developing psychosocial interventions and evaluating treatment outcomes for drug abusing adults with concomitant psychopathology (with a particular focus on depression). She has also conducted research on pharmacological treatments for stimulant users with depression. Her interests include psychological and pharmacological intervention development and outcome evaluation for substance abusers with co-occurring affective disorders, the clinical course of depressive illness in individuals with alcohol and/or drug use disorders, and mechanisms of action or “key ingredients” of psychotherapy and risk factors for psychiatric illnesses in substance abusers. *sglasner@ucla.edu*

Christine E. Grella, Ph.D., is a Professor of Psychiatry and Biobehavioral Sciences at the Integrated Substance Abuse Programs (ISAP), Semel Institute for Neuroscience and Human Behavior, University of California, Los Angeles, and Associate Director of ISAP. Her research focuses on the intersection of multiple service delivery systems, including substance abuse treatment, mental health, child welfare, health services, HIV services, and criminal justice. Her work has examined the relationship of service delivery to treatment outcomes, focusing on treatment for women, adolescents, individuals in the criminal justice system, and individuals with co-occurring mental health and substance use disorders. She has published her work widely in the areas of addiction, mental health, health services, and evaluation research. Dr. Grella directs the NIDA-funded pre- and post-doctoral training program at ISAP and is a Co-Investigator and Director of the Research and Methods Support Core of the NIDA-funded Center for Advancing Longitudinal Drug Abuse Research (CALDAR). *cgrella@mednet.ucla.edu*

Elizabeth A. Hall, Ph.D., is a researcher in UCLA Integrated Substance Abuse Programs’ Criminal Justice Research Group. She currently serves as Co-Investigator for “Using Incentives to Improve Parolee Participation and Attendance in Community Treatment” (NIDA, PI: Prendergast) and for “Health Promotion Coaching/Vaccine for Homeless Parolees” (NIDA, PI: Nyamathi), and as Project Manager for “Criminal Justice Drug Abuse Treatment Studies-2” (NIDA, PI: Prendergast) and “Enhancing Follow-up Rates Through a Rechargeable Incentive Card (RIC) System” (NIDA, PI: Farabee). She was Principal Investigator for “Modeling Risk and Protective Factors for Well-being of Maltreated Youth” (NICHD). With over more than 15 years of substance abuse research, Dr. Hall has been involved in a variety of research

and evaluation projects examining substance abuse treatment outcomes. Her areas of expertise include contingency management in substance abuse treatment settings and substance abuse treatment for women, individuals in the criminal justice system, and families in the child welfare system. Dr. Hall is the author of *Staying in Touch: A Fieldwork Manual of Tracking Procedures for Locating Substance Abusers in Follow-up Studies, 2nd Edition* and provides training throughout the U.S. on follow-up techniques with substance abusing populations. Dr. Hall is an instructor at Loyola Marymount University Extension and has served as an adjunct professor at the University of Southern California. Previously, she was a Senior Associate at IOX Assessment Associates, where she provided technical assistance in evaluation to school districts and state boards of education throughout the nation. In addition, she conducted large-scale evaluations of prevention programs for the Centers for Disease Control Division of Adolescent and School Health, the California Department of Health Services, and the California Wellness Foundation. Dr. Hall's research interests include improving long-term outcomes for women offenders and their children, improving drug treatment services and effectiveness for criminal justice and child welfare populations, and qualitative and longitudinal study methodology. ehall@ucla.edu

Alison B. Hamilton, Ph.D., is an Associate Research Anthropologist in the UCLA Department of Psychiatry. Her main area of interest is the relationship between addiction, mental health, and sexuality among women. She recently completed the NIDA-funded "Women, Methamphetamine, and Sex" study (K01 DA017647), which utilized mixed methods to investigate women methamphetamine users' sexual experiences and behaviors as they relate to their methamphetamine use and/or histories of trauma. She currently serves as a faculty member of the NIMH-funded HIV/AIDS Translational Training Program (Gail Wyatt, PI). In addition, Dr. Hamilton is a Research Health Scientist at the VA Health Services Research & Development Center of Excellence for the Study of Healthcare Provider Behavior, specializing in mental health services research and implementation science, and she is a fellow with the NIMH/VA Implementation Research Institute. alisonh@ucla.edu

Yih-Ing Hser, Ph.D., is Professor-in-Residence in the Department of Psychiatry and Behavioral Sciences at the UCLA Integrated Substance Abuse Programs and the Director of the Center for Advancing Longitudinal Drug Abuse Research. As a trained quantitative psychologist, she has extensive experience in health services research, treatment evaluation, and long-term follow-up research, derived from her prior and ongoing research projects. She has been conducting research in the field of substance abuse and its treatment since 1980 and has extensive experience in research design and advanced statistical techniques applied to substance abuse data. In addition to gender-related issues in substance abuse and treatment, Dr. Hser has published in the areas of treatment evaluation, epidemiology, natural history of drug addiction, and innovative statistical modeling development and application. yhser@ucla.edu

Yu-Chuang (David) Huang, Dr.P.H., M.P.H., is currently serving as senior statistician at the UCLA Integrated Substance Abuse Programs. For the past 10 years, he has been actively involved in large health education and epidemiological research projects at UCLA. He has provided statistical support on several multi-center longitudinal studies examining health care for drug abuse patients in treatment institutes, and is responsible for planning and conducting all data management and statistical analyses, especially in choosing appropriate methods for multivariate analysis. Recently, he has also expanded his research in conducting quantitative analyses of long-term follow-up data for adolescents and for drug users and has made a contribution to the "Center for Advancing Longitudinal Drug Abuse Research" project, which extensively explores life course trajectories of drug use and risky health behaviors as well as the impact of mental disorders and chronic diseases. More recently, he has served as a Principal Investigator in a study funded by the National Institute of Mental Health that examines trajectories of sexual risk behaviors among adolescents and the association of such behaviors with mental health, substance use, and delinquency. yhuang@ucla.edu

Mitchell Karno, Ph.D. (Clinical Psychology, University of California, Santa Barbara, 1997), is Associate Research Psychologist in UCLA's Department of Psychiatry and is the Director of Alcohol Studies at ISAP. Dr. Karno's primary research areas include patient-treatment matching, mechanisms of behavior change for alcoholism, and screening for alcohol problems. Dr. Karno is Principal Investigator for multiple studies funded by the National Institutes of Health, including a study to assess which types of therapist interventions are most and least effective for different patients during alcohol treatment, and a study examining factors associated with help-seeking and change in substance use in the general population. Dr. Karno is Assistant Editor of the journal *Addiction*. karno@ucla.edu

Walter Ling, M.D., is Professor of Psychiatry and Director of the Integrated Substance Abuse Programs (ISAP) at UCLA, one of the foremost substance abuse research groups in the United States and worldwide. He is board certified in neurology and psychiatry, is active in research and clinical work, and has been listed in "Best Doctors in America," "Best Doctors in the West," and "Best Doctors in Los Angeles." Dr. Ling's research in pharmacotherapy for opioid addiction provided pivotal information for the approval of LAAM, naltrexone (in oral and extended-release depot forms), and buprenorphine. His current research includes opioid use disorders, opioid-induced hyperalgesia, treatment of pain in

opioid-maintained patients, including those treated with buprenorphine, the role of buprenorphine in the management of pain in these patients, and examination of methylphenidate for methamphetamine dependence. As Principal Investigator of NIDA's Clinical Trial Network's Pacific Region Node, Dr. Ling is leading a nationwide 11-site trial investigating buprenorphine in the presence of monthly depot naltrexone for its efficacy in reducing cocaine use in cocaine-dependent individuals who have a history opioid use disorder. The scope of ISAP's research under Dr. Ling's leadership has encompassed the development of pharmacotherapies and behavioral therapies for the treatment of substance use disorders involving opioids, cocaine, methamphetamine, alcohol, and nicotine. Dr. Ling has extended ISAP's research beyond the United States to Asia and the Middle East, and he has led or participated in international training efforts in 15 countries to advance addiction medicine and addiction research. lwalter@ix.netcom.com

Larissa Mooney, M.D., is a board-certified addiction psychiatrist with expertise in the treatment of substance use disorders and psychiatric comorbidity. After obtaining residency training at New York University, she completed a fellowship in addiction psychiatry at Cedars-Sinai Medical Center in 2006. Dr. Mooney is an Assistant Clinical Professor of Psychiatry at UCLA, where she supervises and teaches psychiatrists in training at the Addiction Medicine Clinic and the dual-diagnosis inpatient service. She is active in the American Academy of Addiction Psychiatry (AAAP), where she serves on the Board of Directors and as the Editor of the AAAP Newsletter. Since joining UCLA Integrated Substance Abuse Programs in 2007, Dr. Mooney has conducted research on treatment interventions for addictive disorders and has collaborated on community training initiatives to enhance understanding of substance abuse and concomitant psychiatric illness among mental health clinicians. Her interests include development of psychopharmacological and integrated treatments for addiction and advancement of substance abuse training for health care professionals. lmooney@ucla.edu

Nena P. Messina, Ph.D., is a Criminologist at UCLA ISAP and has been involved in substance abuse research for over 12 years. Dr. Messina's areas of expertise include the specialized treatment needs of drug-dependent women offenders and the association between crime, psychiatric disorders, and substance abuse. Recently, Dr. Messina was appointed as a Special Consultant to act as a Governor's Rehabilitation Strike Team Member to create a strategic plan to reform the California prison system in response to Legislative bill AB 900—The Public Safety & Offender Rehabilitation Services Act of 2007. Dr. Messina has also focused her efforts toward identifying the long-term outcomes of drug-exposed children. Dr. Messina is currently the Principal Investigator of several NIDA-funded grants and California state contracts assessing the effectiveness of gender-responsive treatment for women offenders (on parole, in prison, or under community supervision such as drug court and Prop 36). Dr. Messina has collaborated on numerous publications on the psychosocial correlates of substance abuse treatment outcomes and has contributed a great deal to the understanding of co-occurring disorders, trauma and abuse, and treatment responsiveness for women offenders. nmessina@ucla.edu

Debra A. Murphy (Ph.D. in Psychology, Florida State University, 1987) is a Research Psychologist and Director of the Health Risk Reduction Projects within UCLA ISAP. She has conducted HIV/AIDS behavioral research on children, adolescents, adults, and families over the past 21 years. Dr. Murphy is currently Principal Investigator on two NIMH-funded R01s. The first is to assess the impact of maternal HIV/AIDS on late adolescent/early adult children in what will be a 15-year longitudinal study, as she has followed these families since the children were 6 to 11 years of age. The second is to test the preliminary efficacy of a parenting intervention for HIV-infected mothers with well children age 6 to 14 years old. Overall, she has been the P.I. on nine federally funded grants and three state-funded grants, as well as a Co-investigator on 18 federally funded projects. Prior to coming to UCLA, she was the Associate Director for the Center for AIDS Intervention in Wisconsin, and Co-Investigator on a series of federal grants focused on outcome evaluations of HIV behavioral risk-reduction interventions. dmurphy@mednet.ucla.edu

Deborah Podus, Ph.D., is an Associate Research Sociologist at UCLA ISAP whose primary research interests are treatment effectiveness and substance abuse treatment policy. Dr. Podus has conducted numerous policy and treatment-related projects at ISAP including, most recently, research on disaster preparedness for disruptions in methadone treatment and research on migration and substance abuse among first generation Mexican migrants. Other studies have focused on the intersection between substance abuse and welfare reform, research on the impact of the termination of SSI benefits to persons disabled by substance abuse, and research on methadone treatment regulation. She has also been Co-PI and project director for several meta-analyses on various aspects of drug abuse treatment. Her research has been funded by grants from the National Institute on Drug Abuse, the Robert Wood Johnson Foundation-Substance Abuse Policy Research Program, the Center on Substance Abuse Treatment (CSAT), the California Policy Research Center, and UC MEXUS. Podus has a doctorate in Sociology from Rutgers University and received postdoctoral training in mental health service systems and evaluation research at UCLA. dpodus@ucla.edu

Michael Prendergast, Ph.D., is Director of the Criminal Justice Research Group at UCLA ISAP. He has directed various projects studying drug treatment strategies in the criminal justice system. He has been Principal Investigator of evaluations of treatment programs in correctional settings in California: the Forever Free Treatment Program at the California Institution for Women, the California Substance Abuse Treatment Facility at Corcoran, and 15 treatment programs at other California prisons. He has also been Principal Investigator of several NIDA-funded studies: a five-year follow-up study of participants in a prison-based therapeutic community, a study of the use of vouchers within a drug court treatment program, a study of the relative effectiveness of mixed-gender and women-only community treatment, and a study of incentives to increase retention in a residential treatment program for parolees. He was Co-Principal Investigator of the statewide evaluation of the Substance Abuse and Crime Prevention Act (Proposition 36) and is currently Principal Investigator of the Pacific Coast Research Center of the NIDA-funded Criminal Justice Drug Abuse Treatment Studies (CJ-DATS). He has also conducted three meta-analyses on the effectiveness of drug abuse treatment. His research interests include treatment effectiveness, meta-analysis, treatment policy, issues in coerced treatment, and treatment for drug-abusing offenders. His work has been published in *American Journal of Drug and Alcohol Abuse*, *American Journal of Public Health*, *Criminal Justice and Behavior*, *Drug and Alcohol Dependence*, *Journal of Drug Issues*, *Journal of Offender Rehabilitation*, and *Prison Journal*. mip@ucla.edu

Richard A. Rawson, Ph.D., is an Associate Director of UCLA Integrated Substance Abuse Programs and Professor-in-Residence at the UCLA Department of Psychiatry, in which he has been a member for more than 20 years. He received a Ph.D. in experimental psychology from the University of Vermont in 1974. Dr. Rawson oversees clinical trials on pharmacological and psychosocial addiction treatments. He is principal investigator of the NIDA Grant: Aerobic Exercise to Improve Outcomes for Treatment of Methamphetamine Dependence and the SAMHSA/Department of State: Iraq Drug Demand Reduction Initiative and the SAMHSA/PEPFAR: Cooperative Agreement for Workforce Development in Vietnam: HIV-Addiction Technology Transfer Center. He has led addiction research and training projects for the United Nations, the World Health Organization, and the U.S. State Department, exporting science-based knowledge to many parts of the world. Dr. Rawson has published 3 books, 33 book chapters, and over 200 peer-reviewed articles and has conducted over 1,000 workshops, paper presentations, and training sessions. rrawson@mednet.ucla.edu

Cathy J. Reback, Ph.D., is an Associate Research Sociologist with UCLA ISAP, a Senior Research Scientist with Friends Research Institute, Inc., and a Core Scientist with the UCLA Center for HIV Identification, Prevention and Treatment Services (UCLA CHIPTS). Dr. Reback's research focuses on the intersection of sexual identity, gender identity, substance use and HIV risk behaviors. Currently, Dr. Reback is Principal Investigator of a NIDA-funded study evaluating contingency management with non-treatment seeking MSM substance users, Voucher-based Incentives in a Prevention Setting (VIPS), a CHRP-funded study to evaluate the efficacy of contingency management for optimizing Post-exposure Prophylaxis (PEP) among stimulant-using MSM, Optimizing Access to Non-occupational Post Exposure Prophylaxis for HIV Using Contingency Management in Stimulant-Using Men Who Have Sex with Men, and a CDC-funded project to adapt and transfer the Safety Counts evidence-based intervention for use among high-risk transgender women. Additionally, Dr. Reback currently serves as the Director of six county-funded contracts for high-risk MSM substance users and transgender women and two city-funded contracts. Dr. Reback has served as Principal Investigator or Co-Principal Investigator of ethnographic, intervention and epidemiological studies funded by CDC, NIDA, CSAT, CHRP, and California State Office of AIDS. Dr. Reback has collaborated with Dr. Steve Shoptaw on major research intervention studies that evaluated behavioral therapies and HIV risk reduction for gay and bisexual male methamphetamine users. Dr. Reback's community and policy work includes current and past membership on numerous local and national HIV/AIDS and substance abuse task forces and advisory committees. rebackcj@aol.com

Cheryl Teruya, Ph.D., is currently Principal Investigator for "Exploring Proposition 36 as a Turning Point in Life Course Drug Use Trajectories" (NIDA) and Project Director for "Retention of Suboxone Patients in START: Perspectives of Providers and Patients" (NIDA) and "Drum-assisted Recovery Therapy for Native Americans" (NCCAM). She also serves as the Coordinator for the NIDA-funded Center for Advancing Longitudinal Drug Abuse Research (CALDAR) at the UCLA Integrated Substance Abuse Programs (ISAP). Previously, Dr. Teruya was Co-Principal Investigator for a study examining treatment motivation among drug users and has directed studies investigating treatment providers' readiness for implementing research into practice and the impact of California's Proposition 36 on the drug treatment system. In addition, she led the qualitative study for the California Treatment Outcome Project (CalTOP), conducting and analyzing data from over 30 focus groups with community-based treatment providers throughout California and directed focus groups with county stakeholders as part of the Substance Abuse and Crime Prevention Act (SACPA) Evaluation in California. Dr. Teruya has experience examining organizational change issues in public institutions and helping groups manage and deal with change in the corporate setting through workshops, teambuilding activities, and consultation. She has been conducting research at UCLA ISAP since 1999. cteruya@ucla.edu

Principal Investigators

Darren Urada, Ph.D., is Principal Investigator and co-investigator on multiple studies on the integration of SUD services with primary care, mental health, and HIV/AIDS services. Dr. Urada also served as the Principal Investigator of California's official statewide evaluation of the Substance Abuse and Crime Prevention Act of 2000 (aka Proposition 36). Prior to this work, he was principal investigator on a grant to convene a meeting on the integration of SUD treatment with primary care that drew international experts from 23 countries as well as co-sponsorship from NIDA, SAMHSA, WHO, UNODC, and others. Dr. Urada's other work has included serving as project director for the California State Treatment Needs Assessment Program and for a study on substance abuse and welfare reform, and contributing to the California Treatment Outcome Project (CalTOP), meta-analytic studies on substance use and HIV/AIDS, and research on treatment expansion. Dr. Urada also served as a relapse prevention group facilitator at an outpatient treatment clinic on a volunteer basis for about one year. He has worked for the UCLA Integrated Substance Abuse Programs since 1998. Dr. Urada has authored over 75 chapters, reports, and peer-reviewed journal articles. durada@ucla.edu

ISAP Projects

Basic Science/ Neurophysiology/Imaging

Cognitive Neuroscience of Decision Making in Recovery from Alcoholism

*Mitchell Karno, Ph.D., Principal Investigator
(karno@ucla.edu)*

This career development award will promote Dr. Karno's progression into transdisciplinary research on recovery from alcoholism. Building on Dr. Karno's background in studying the mechanisms of action of behavioral treatments, the goal of this application is to gain expertise in cognitive neuroscience as it relates to efforts to change one's alcohol use. The objectives of the project are to acquire sufficient knowledge of decision theory, neuroscience, and neuroimaging to permit Dr. Karno to conduct independent research that examines linkages between thought processes and brain activity with changes in alcohol use among problem drinkers.

Cognitive Neuroscience of Decision Making in Recovery from Alcoholism was funded by the National Institute on Alcohol Abuse and Alcoholism, grant 1 K02 AA018374, from August 2011 to July 2016.

Refinement and Validation of a Portable, Salivary Biosensor of Psychosocial Stress

*Vivek Shetty, D.D.S., Principal Investigator
(vshetty@ucla.edu)
Debra A. Murphy, Ph.D.
(dmurphy@mednet.ucla.edu), Co-Investigator
Rachel Fintzy, M.A.
(rfintzy@mednet.ucla.edu), Project Director*

In this two-phase study, we tested the effectiveness of a salivary biomarker, a small biosensor for salivary analytes. In Phase 1, we optimized the performance characteristics of the biosensor among 50 healthy controls. In Phase 2, we conducted functional validation of the biosensor in a cohort of 185 socio-economically vulnerable males with high systemic isolated facial injury, along with examination

of the effect of psychosocial factors and addictive behaviors on salivary analytes, as determined by the biosensor.

Refinement and Validation of a Portable, Salivary Biosensor of Psychosocial Stress was funded by the NIH/NIDA to the UCLA Department of Dentistry, Grant 1 U01 DA023815, with collaboration by UCLA ISAP, from August 2007 to April 2011.

The Oral and Dental Consequences of Methamphetamine Use

*Vivek Shetty, DDS, Dr. Med. Dent., Principal Investigator
Debra A. Murphy, Ph.D., Co-Investigator
(dmurphy@mednet.ucla.edu)
Rachel Fintzy, M.A., Project Director*

The primary objectives of this study are to validate that the rates and patterns of dental caries and oral disease are substantially different in methamphetamine (MA) users than non-MA users; to characterize the relationship between dental consequences, patterns of MA-use and other individual characteristics; and to investigate the extent to which negative self-image among MA-users is associated with a willingness to seek treatment. This project is currently in the data collection phase.

The Oral and Dental Consequences of Methamphetamine Use is funded by the National Institutes of Health, grant 1 R01 DA025680 to the UCLA Department of Dentistry, from April 2010 to January 2014.

Clinical Trials and Medication Development

A Phase 2, Double-Blind, Placebo-Controlled Trial of Bupropion for Methamphetamine Dependence

Walter Ling, M.D., Principal Investigator (lwalter@ucla.edu)
Richard A. Rawson, Ph.D., Site Principal Investigator
Valerie P. Antonini, M.P.H., Project Director

This project was a multi-site double-blind, placebo-controlled, parallel-group design study targeting methamphetamine users, in which participants were randomly assigned to receive either placebo or bupropion daily for 12 weeks. Participants also received group cognitive behavioral therapy (CBT) three times weekly along with weekly assessments to collect information on status and functioning. Additional follow-up assessments occurred weekly for 4 weeks after completion of study interventions. Eligibility criteria included methamphetamine use on 29 or fewer days (non-daily use) during the 30 days prior to signing consent. The primary goal of this study was to assess the efficacy of bupropion in reducing methamphetamine use in participants using methamphetamine on 29 or fewer days during the 30 days prior to signing consent. It was hypothesized that bupropion, compared to placebo, would be associated with an increase in the proportion of subjects who achieved abstinence (confirmed by at least two methamphetamine-negative urines) each week during the last two weeks (Weeks 11 and 12) for non-daily users. Results are pending final analysis.

A Phase 2, Double-Blind, Placebo-Controlled Trial of Bupropion for Methamphetamine Dependence was funded by the National Institute on Drug Abuse, grant number N01 DA-3-8824, from September 2007 to December 2010.

Aerobic Exercise to Improve Outcomes of Treatment for Methamphetamine Dependence

Richard A. Rawson, Ph.D., Principal Investigator
(rrowson@mednet.ucla.edu)
Christopher Cooper, MD; Edythe London, PhD, & Larissa Mooney, MD, Co-Investigators
Joy Chudzynski, Psy.D., Project Director
(joychud@ucla.edu)

This 5-year study, funded by NIDA, seeks to assess the efficacy of aerobic and resistance exercise for the treatment of methamphetamine dependence in a population of 150 individuals in residential treatment. After signing consent and satisfying all inclusion requirements, participants undergo baseline assessments during approximately 2 weeks of treatment as usual. After randomization, participants enter either the Education condition, consisting of 45- to 50-minute health education sessions 3 times per week for 8 weeks ($n = 75$), or the Exercise condition, consisting of aerobic and resistance exercise 3 times per week for 8 weeks ($n = 75$).

The primary goal of the study is to determine whether inclusion of aerobic and resistance exercise within a residential program improves treatment outcomes in terms of reduced methamphetamine use during the first 12 weeks after discharge and at a 26-week follow-up, as well as to characterize effects of exercise on health, psychiatric symptoms, and cognition compared to the control (education) group at pre/post intervention.

Of the 150 participants, a subset of voluntary participants will take part in a brain imaging substudy. This substudy will use Positron Emission Tomography (PET) and Magnetic Resonance Imaging (MRI) scans to see if cells in the brain change after therapy and treatment for methamphetamine dependence. Specifically, we will see if group participation (exercise or education group) changes the availability of dopamine in the brain.

Preliminary Data Analysis:

An initial data analysis consisted of 42 individuals who were randomized to 3 days/week of exercise training (EX, $n = 22$) or health education (ED, $n = 21$) over an 8-week study period. Mood was assessed using the Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), Profile of Mood States (POMS), and Daily Mood Rating at baseline

(BL), weekly, and at intervention completion (Week 8). Neurocognitive function, aerobic fitness, body composition, muscle strength, and endurance were assessed at BL and Week 8. **Results:** Both groups showed significant ($p < .05$) decreases in mean BAI, mean BDI, and mean POMS scores from BL to Week 8. Mean BAI score for EX group (12.1 to 2.2), ED group: (12.0 to 4.4); Mean BDI score for EX: (11.6 to 3.8), ED: (13.7 to 5.8); Mean POMS Total Mood Disturbance for EX: (48.6 to 17.1), ED: (52.5 to 22.8). On a Daily Mood Rating taken after each session, participants in the EX group reported feeling more euphoric ($p = .05$) and a decrease in craving ($p < .05$) from BL to Week 8, while the ED group did not show any significant changes from BL to Week 8. With regard to neurocognitive measures, performance was improved ($p < .05$) on memory and motor speed tests for those in the EX group. Regarding physiological measures, participants in the EX group significantly ($p < .05$) increased oxygen uptake, muscle strength (chest & legs) and endurance (chest & legs), and showed a reduction in body weight, fat weight, and percent relative body fat from BL to Week 8. The ED group did not show any significant changes in the above physiological variables from BL to Week 8. **Conclusions:** Although these results are preliminary, this is the first known study to report the psychological, cognitive and physiological effects of 8 weeks of exercise training on methamphetamine-dependent individuals. The impact of these changes on recovery from methamphetamine dependency remains to be elucidated in this ongoing study.

Aerobic Exercise to Improve Outcomes of Treatment for Methamphetamine Dependence was funded by the National Institute on Drug Abuse, grant 1R01DA027633-01, from September 2009 to August 2014.

Cell Phone Technology Targeting ART & Suboxone Adherence and Injection Drug Use

Suzette Glasner-Edwards, Ph.D., Principal Investigator
(sglasner@ucla.edu)

Richard Rawson, Ph.D., Walter Ling, M.D., Alison Hamilton, Ph.D., Larissa Mooney, M.D., & Michele Ybarra, Ph.D., Co-Investigators

Helene Chokron Garneau, M.P.H., Project Director

The objective of the current research is to improve treatment for injection opioid users by augmenting

buprenorphine pharmacotherapy with an innovative text-messaging strategy to promote relapse prevention skills, reduce HIV-risk behaviors, and improve buprenorphine and HIV treatment regimen adherence. The specific aims of this research are (1) To develop and refine, with user feedback, a cognitive behavioral therapy-based text-messaging intervention (TXT-CBT) to augment buprenorphine pharmacotherapy in HIV-infected injection drug users (IDUs) with opioid dependence; (2) To conduct a pilot randomized clinical trial to assess the feasibility of recruiting and retaining individuals for a large-scale study and to determine the effect size of TXT-CBT over and above medication management with buprenorphine (MM) on opioid use, HIV medication adherence, buprenorphine adherence, and healthcare outcomes; and (3) To examine potential mechanisms of action of TXT-CBT, including self-efficacy, affect regulation, and social support. We hypothesize that TXT-CBT delivered in conjunction with MM will produce greater reductions in opioid use and HIV-risk behaviors, and will improve buprenorphine and HIV treatment regimen adherence, relative to MM alone. Further, we expect that MM+TXT-CBT will facilitate greater changes in negative affect, self-efficacy, and social support, and these changes will be associated with substance use outcomes. By providing support to maximize HIV treatment regimen adherence, coupled with coping skills to address withdrawal symptoms and stress, two important factors in opioid relapse, TXT-CBT may provide a promising, cost-effective, and easily deployable augmenting strategy for the treatment of opioid users who are HIV-infected.

Cell Phone Technology Targeting ART & Suboxone Adherence and Injection Drug Use was funded by the National Institute on Drug Abuse, grant 1 R34 DA0133196, from July 2012 to June 2015.

Duloxetine for Depressed Substance Abusers

Suzette Glasner-Edwards, Ph.D., Principal Investigator
(sglasner@ucla.edu)

Richard A Rawson, Ph.D., and Walter Ling, M.D., Co-Investigators

This pilot study examined the efficacy of duloxetine combined with group psychotherapy for individuals with

stimulant dependence and comorbid major depressive disorder. Although the past decade has seen new pharmacological and psychological interventions producing improvement in substance use outcomes, few studies have systematically explored the efficacy of these approaches in combination with patients with substance use disorders and comorbid mental health disorders. This open-label trial included 20 dually diagnosed individuals with stimulant dependence and Major Depressive Disorder. We examined the efficacy of 12 weeks of treatment with duloxetine and group psychotherapy on outcomes for depression and substance use. The primary hypothesis was that duloxetine in conjunction with psychotherapy would produce reductions in depressive symptoms and stimulant use. **Results:** Duloxetine was found to be safe and efficacious in a population of stimulant-dependent adults with concomitant major depressive disorder. Among those who completed the study, a significant reduction (greater than 50%) in depressive symptom severity from baseline was observed at treatment-end, as measured by both clinician-rated (HAM-D) and participant self-report (BDI) measures. Hypotheses concerning secondary outcomes were partially met. Minimal improvement in stimulant use and global improvement in stimulant dependency was observed over the course of the trial. Nevertheless, consistent with hypotheses, there was a significant reduction in pain severity reported by participants from baseline to the end of treatment. The results of this open-label pilot trial indicate that among stimulant-dependent adults with comorbid depressive illness, duloxetine is a safe and efficacious medication for the treatment of depression and to target associated pain symptomatology. However, effects of this treatment on substance use appear to be minimal.

Duloxetine For Depressed Substance Abusers was funded by the Eli Lilly Corporate Center, contract number F1J-US-X046, from October 2007 to May 2011.

Mindfulness-Based Relapse Prevention for Stimulant Users

Suzette Glasner-Edwards, Ph.D., Principal Investigator
(sglasner@ucla.edu)
Richard Rawson, Ph.D., Larissa Mooney, M.D.,
Co-Investigators

The objective of this research was to improve treatment for stimulant dependence by augmenting traditional relapse prevention therapy with innovative meditation-based strategies to promote affect regulation skills. Based on Mindfulness-Based Cognitive Therapy for depression (Segal, Teasdale, & Williams, 2002), Marlatt and colleagues recently developed a manualized intervention for the treatment of substance-using populations: Mindfulness Based Relapse Prevention (MBRP). The specific aims of this research were (1) to conduct a pilot randomized clinical trial comparing MBRP relative to a health education (ED) control group in stimulant users receiving contingency management (CM); (2) to test the impact of MBRP compared to ED on negative affect, stimulant use, and healthcare outcomes; and (3) to examine potential mechanisms of action of MBRP, including reductions in stress reactivity and biological indicators of arousal (e.g., blood pressure and heart rate). **Results:** Medium effect sizes favoring the MBRP condition were observed for affect regulation and overall psychiatric severity outcomes. Specifically, depressive symptom severity, measured by the Beck Depression Inventory, changed differentially and significantly over time as a function of intervention condition, with MBRP participants reporting greater reductions that were sustained through 1 month posttreatment ($p < 0.03$; Effect Size = 0.58). Likewise, the MBRP group evidenced greater declines over time in anxiety symptoms, measured by the Beck Anxiety Inventory ($p < 0.02$; Effect Size = 0.72 at 1 month posttreatment) and psychiatric severity, indicated by the Addiction Severity Index ($p < 0.02$; Effect Size = 0.61). Results of a laboratory test of stress reactivity, the Trier Social Stress Task, indicated that cortisol levels were elevated across multiple measurements in the hour following exposure to a stressor in a substantially larger proportion of control group participants, relative to MBRP participants, for whom post-stressor cortisol levels returned to baseline or lower. Problems associated with stimulant addiction declined to a greater extent through 1

month posttreatment among those in MBRP, an effect that approached significance ($p = 0.06$). Analyses of stimulant use outcomes in association with changes in negative affect and stress reactivity and intervention condition are presently under way. Taken together, the present findings strongly suggest that Mindfulness Based Relapse Prevention has great utility as an adjunct to behavioral interventions targeting stimulant use (i.e., contingency management) in that it effectively reduces negative affect, stress reactivity, and psychiatric impairment, and may reduce dependency severity among stimulant users.

Related Presentation:

Glasner-Edwards, S., Mooney, M, Brecht, L., & Rawson, R. (2012). *Mindfulness-based relapse prevention reduces negative affect and stress reactivity among stimulant-dependent adults*. Poster presentation at the 74th Annual Meeting of The College on Problems of Drug Dependence Palm Springs, CA, June 9-14.

Mindfulness-Based Relapse Prevention for Stimulant Users was funded by the National Institute on Drug Abuse, grant 1 R21 DA029255, from April 2010 to March 2012.

Motivational Therapy for Substance Users with Depression

Suzette Glasner-Edwards, Ph.D., Principal Investigator
(sglasner@ucla.edu)
Anne Bellows, Project Director

This study examined the incremental efficacy of an aftercare psychosocial treatment program of a motivational intervention combined with cognitive behavioral therapy (CBT), relative to standard care or treatment as usual (TAU) for individuals with alcohol or drug dependence and comorbid major depressive disorder. Although the past decade has seen new cognitive and motivational interventions producing improvement in substance use outcomes, few studies have systematically explored the efficacy of these approaches in combination in patients with substance use disorders and comorbid mental health disorders. This randomized psychosocial clinical trial included 70 dually diagnosed individuals with alcohol or drug dependence and a substance-independent diagnosis of Major Depressive Disorder. Among patients receiving pharmacotherapy for depression, we compared 12 weeks

of CBT combined with motivational therapy (CBT-MT) to 12 weeks of treatment-as-usual (TAU) on 6-, 12-, and 24-week outcomes for depression, substance use, and other healthcare outcomes. Preliminary findings suggest that participation in CBT-MT was associated with better treatment engagement and retention, relative to TAU. In turn, greater engagement and compliance with treatment was associated with larger improvements in depressive symptomatology. Analyses of substance use outcomes will also be conducted. The results of this study might provide a dual-diagnosis specific, cognitive-motivational alternative to traditional aftercare programs for the treatment of stimulant users with depression.

Related Presentation:

Glasner-Edwards, S., Brown, S.A., & Rawson, R.A. (November, 2012). *Integrated CBT and motivational enhancement therapy versus community 12-step participation as continuing care for substance dependent adults with major depression: preliminary results of a pilot clinical trial*. Paper presented at the 46th Annual Meeting of the Association of Behavioral and Cognitive Therapy, National Harbor, Maryland.

Motivational Therapy for Stimulant Users with Depression was funded by the National Institute on Drug Abuse, Grant 1 K23 DA020085 (September 2007 to August 2012).

Optimizing Outcomes Using Suboxone for Opiate Dependence

Walter Ling, M.D., Principal Investigator (lwalter@ucla.edu)
Maureen Hillhouse, Ph.D., & Richard Rawson, Ph.D.,
Co-Investigators

This study was a randomized controlled trial that tested the comparative efficacy of several approaches combining psychosocial treatment with pharmacotherapy for treatment of opioid dependence. In conjunction with buprenorphine pharmacotherapy, psychosocial treatment conditions included a cognitive behavioral therapy (CBT) condition with medical management (MM), a Contingency Management condition (CM) with MM, a combined CBT+CM condition with MM, and a standard MM condition with neither CBT nor CM, which approximated what physicians do in general when prescribing buprenorphine in their office practice to patients with opioid dependence. Eligible participants were stabilized on the study drug for

a period of 2 weeks and then were randomly assigned to one of the four conditions for 16 weeks. This first period was followed by a second 16-week period during which all participants continued to receive buprenorphine treatment but did not engage in any psychosocial treatment as part of continued study participation. Medical management of the participants was identical to that delivered during the first treatment phase. At the end of this second 16-week buprenorphine-only treatment period, participants were tapered off buprenorphine within a maximum of 6 weeks, or received referral for continued treatment if they were unable to successfully complete the taper. Participants were again assessed at 40-weeks and 52-weeks post-entry into the study. Participants were 202 opioid-dependent males and non-pregnant, non-lactating females of all racial/ethnic groups who were at least 15 years of age.

Optimizing Outcomes Using Suboxone for Opiate Dependence was funded by the National Institute on Drug Abuse, grant 1 R01 DA020210, from September 2006 to May 2011.

PRO 806: A Randomized, Placebo and Active-Controlled, Multi-Center Study of Probuphine in Patients with Opioid Dependence

Walter Ling, M.D., Principal Investigator (lwalter@ucla.edu)

This study was a randomized, placebo- and active-controlled, multi-center study to assess the effectiveness of Probuphine (buprenorphine hydrochloride/ethylene vinyl acetate), an implantable formulation of buprenorphine hydrochloride (HCl) under development for the treatment of opioid dependence. Probuphine was inserted subdermally into the inner side of the subject's upper arm, in a brief in-office procedure under local anesthetic, and was designed to provide sustained release of BPN for 6 months. Each Probuphine implant consisted of 80 mg of BPN HCl that had been blended and extruded with ethylene vinyl acetate (EVA). Each placebo implant consisted of extruded ethylene vinyl acetate (EVA). Both the Probuphine and placebo implants were sterile and measured approximately 26 mm in length and 2.5 mm in diameter. Across all sites, approximately 250 subjects from 20–25 clinical centers who met eligibility criteria were randomized to 1 of 3

treatment groups in a 2:1:2 ratio [Group A: 4 Probuphine implants (n=100); Group B: 4 placebo implants (n=50); Group C: 12–16 mg/day SL BPN (n=100)], for 24 weeks of treatment.

PRO 806: A Randomized, Placebo and Active-Controlled, Multi-Center Study of Probuphine in Patients with Opioid Dependence was funded by Titan Pharmaceuticals, Inc., contract 20080840, from April 2010 to March 2011.

PRO-811: A Phase 3, Six-Month, Open-Label Re-Treatment Study of Probuphine in Opioid Addiction

Walter Ling, M.D., Principal Investigator (lwalter@ucla.edu)

Larissa Mooney, M.D., Co-Investigator

(lmooney@mednet.ucla.edu)

Jessica Jenkins, M.A., Project Director

The primary objective of this trial was to evaluate the safety of Probuphine in subjects who have completed 24 weeks of treatment and who were re-treated with Probuphine for an additional 24 weeks. Probuphine (buprenorphine hydrochloride/ethylene vinyl acetate) is an implantable formulation of buprenorphine hydrochloride (HCl) under development for the treatment of opioid dependence following induction with sublingual buprenorphine (BPN). Probuphine was inserted subdermally into the inner side of the subject's upper arm, in a brief in-office procedure under local anesthetic. It may also have been inserted in an alternate location if deemed medically necessary by the implanting clinician. Probuphine is designed to provide sustained release of BPN for 6 months. At the end of each 6-month treatment, Probuphine was removed in a brief, in-office procedure under local anesthetic. Each Probuphine implant consisted of 80 mg of BPN HCl that had been blended and extruded with ethylene vinyl acetate (EVA). Each placebo implant consisted of extruded ethylene vinyl acetate (EVA). Both the Probuphine and placebo implants were sterile and measured approximately 26 mm in length and 2.5 mm in diameter. Subjects who completed study PRO-806 (see above) were eligible to be enrolled in PRO-811. This study provided safety data in subjects treated

with Probuphine for up to 2 consecutive 6-month treatment periods. For more information, please visit <http://www.titanpharm.com/products.htm>.

PRO-811: A Phase 3, Six-Month, Open-Label Re-Treatment Study of Probuphine in Opioid Addiction was funded by Titan Pharmaceuticals, Inc., contract PRO-811, from January 2011 to January 2012.

Sustained-Release Methylphenidate for Management of Methamphetamine Use Disorders

*Walter Ling, M.D., Principal Investigator (lwalter@ucla.edu)
Maureen Hillhouse, Ph.D., & Richard Rawson, Ph.D.,
Co-Investigators
Jessica Jenkins, M.S., Project Director*

This study will evaluate the ability of sustained-release methylphenidate (MPH) to reduce stimulant abuse and increase treatment retention among 90 individuals seeking treatment for methamphetamine dependence. The 4-year double-blind, placebo-controlled study includes methamphetamine-dependent individuals assessed using DSM-IV criteria. Eligible participants are randomized to placebo ($n = 45$) or MPH ($n = 45$) for 10 weeks in the double-blind phase. Active medication participants receive 18mg MPH/daily for Week 3, 36mg/daily for Week 4, and 54mg/daily for Weeks 5-10. Placebo participants are given a placebo that is prepared to appear identical to active medication. During the active medication phase, all participants are also provided with weekly group sessions of cognitive behavioral therapy (CBT), and motivational incentives (MI) are provided for methamphetamine-negative urine test results. After the active medication phase, all participants receive placebo for the final 4 study weeks (Weeks 11-14) in the single-blind phase, and continue CBT and MI.

Sustained-Release Methylphenidate for Management of Methamphetamine Use Disorders was funded by the National Institute on Drug Abuse, grant 1 R01 DA025084, from February 2009 to December 2012.

The National Drug Abuse Clinical Trials Network

*Walter Ling, M.D., Principal Investigator (lwalter@ucla.edu)
Richard A. Rawson, Ph.D., Larissa Mooney, M.D., &
Steven Shoptaw, Ph.D., Co-Investigators
Albert L. Hasson, M.S.W., Project Director*

As one of 13 Regional Research Training Centers, ISAP has completed its 12th year as the Pacific Region Node of NIDA's Clinical Trials Network (CTN), and continues to collaborate with academic centers and local community treatment programs in an effort to make substance abuse research more relevant to the treatment community. The Pacific Region Node is pleased to have recently teamed up with Dr. Linda Chang at the University of Hawaii, Queens Medical Center, to work cooperatively to develop and implement CTN protocols to address methamphetamine abuse and dependence. Dr. Chang is one of the world's foremost researchers on brain imaging and the impact of substance abuse on brain function. ISAP continues its longstanding relationship with community treatment programs: The Betty Ford Center, Bay Area Addiction Research and Treatment, Inc., Matrix Institute on Addictions, Hina Mauka Treatment Programs, Tarzana Treatment Center, and most recently, the Harbor-UCLA Division of HIV Medicine through the implementation of the CTN 0049 study, **Hospital Visit as Opportunity for Prevention and Engagement for HIV-Infected Drug Users (HOPE)**.

In November 2012, CTN 0048, **Cocaine Use Reduction with Buprenorphine**, CURB, led by Drs. Ling, Saxon, and Mooney completed recruitment and is in the final stages of data collection at 10 sites nationwide. Concerns over the recruitment and implementation of this relatively complex trial were unfounded as the 10 sites, including the ISAP Outpatient Clinical Research Center completed recruitment 7 months in advance of the projected recruitment timeline. The CURB "methods" paper has been accepted by the journal *Contemporary Clinical Trials*.

Following the completion of the 9-site trial comparing the impact of Suboxone and methadone on liver function in treatment-seeking opioid-dependent individuals, **Starting Treatment with Agonist Replacement Therapies (START)**, Maureen Hillhouse, Ph.D., led several working

groups in the development and publication of the study results. The START main outcome results were published in the August 2012 *Journal of Drug Alcohol Dependence*, with several more manuscripts in the development phase.

The Pacific Region Node community treatment programs continue to play an active role in the NIDA CTN. Under the direction of Marie Hughes and Monique Weisman, staff at the Hina Mauka, Waipahu facility, made their Hawaii site the nation's top recruitment location for CTN 0044, **Web-delivery of Evidence-Based, Psychosocial Treatment for Substance Use Disorders**, an evaluation of the addition of a Web-based intervention to face-to-face counseling and are participating in the development of project manuscripts. The Matrix Institute on Addictions, Rancho Cucamonga, and the Tarzana Treatment Center completed recruitment and data collection on CTN 0046, **Smoking Cessation and Stimulant Treatment (S-CAST): Evaluation of the Impact of Concurrent Outpatient Smoking-Cessation and Stimulant Treatment on Stimulant-Dependent Outcomes**. Currently in development at UCLA ISAP for the NIDA CTN is the CTN 0054 protocol, **Accelerated Development of Additive Pharmacotherapy Treatment for Methamphetamine Dependence (ADAPT-MD)**. ADAPT-MD is a three-site, two-stage trial designed to investigate a combination medication, extended-release depot naltrexone plus extended release bupropion as a potential pharmacotherapy for methamphetamine dependence. ADAPT will be led by Drs. Walter Ling and Larissa Mooney of the Pacific Region Node. Recruitment for this project is scheduled to begin in the spring of 2013. (Additional information is available at www.uclaisap.org/ctn/index.html.)

The National Drug Abuse Clinical Trials Network was funded by the National Institute on Drug Abuse, grant 2 U10 DA13045, from September 2005 through August 2010.

Criminal Justice Populations

A Randomized Controlled Trial of the Second Chance Program for Ex-Inmates

*David Farabee, Ph.D., Principal Investigator
(dfarabee@ucla.edu)*

*Sheldon Zhang, Ph.D., Co-Investigator
Benjamin Wright, M.S., Project Director*

The major goal of this project was to conduct an outcome evaluation and cost analysis of the Second Chance Reentry Program in San Diego, California. Over the decades, various offender re-entry efforts have been tried and evaluated, but few of these evaluation efforts have relied on rigorous study designs. In this study, we subjected this nationally recognized reentry program to a randomized clinical trial design in order to examine its effectiveness. Outcomes were tracked for 12 months and included drug use, employment, and recidivism.

A Randomized Controlled Trial of the Second Chance Program for Ex-Inmates was funded by the Smith Richardson Foundation, grant 2008-7752, from September 2008 to September 2011.

An Experimental Comparison of Telepsychiatry and Conventional Psychiatry for Mentally Ill Parolees

*David Farabee, Ph.D., Principal Investigator
(dfarabee@ucla.edu)*

Stacy Calhoun, M.A., Project Director

Currently, the California Department of Corrections and Rehabilitation (CDCR) Parole Division serves over 10,000 mentally ill offenders a year through a system of parole outpatient clinics (POCs) across the state. Many of these parolees return to rural or remote counties, where psychiatric care is limited or unavailable. Recognition of this problem has led CDCR to offer psychiatric treatment via telemedicine video conferencing to a small number of its parolees, with tentative plans to expand this approach statewide. However, the clinical- and cost-effectiveness

of this approach has yet to undergo a rigorous evaluation. This randomized study compares the effectiveness of telepsychiatry relative to face-to-face sessions with regard to satisfaction with treatment/therapeutic alliance, medication adherence, session attendance, psychological functioning, and recidivism among mentally ill parolees. In addition, this study includes a cost-effectiveness analysis to assess potential cost savings associated with the use of telemedicine with mentally ill parolees returning to rural or remote areas of the state.

An Experimental Comparison of Telepsychiatry and Conventional Psychiatry for Mentally Ill Parolees was funded by the National Institute of Justice, grant 2010-DJ-BX-2002, from January 2011 to September 2013.

Computerized Psychosocial Treatment for Offenders with Substance Use Disorders

Michael Prendergast, Ph.D., Principal Investigator
(mlp@ucla.edu)

The majority of individuals in criminal justice settings across the United States have a critical need for science-based, psychosocial treatment that targets substance use and HIV risk behavior. National Development and Research Institutes (NDRI) developed and demonstrated the efficacy of a computer-based, interactive, psychosocial treatment program, the Therapeutic Education System (TES), that can answer this need. This computer-based therapeutic tool allows complex interventions to be delivered with fidelity to the evidence-based model and at low cost due to its self-directed nature (e.g., minimal staff time/training needed), thus offering the potential for future sustainability and dissemination within criminal justice systems. This study employed random assignment of incarcerated male and female offenders with substance use disorders ($N = 526$) to either (1) TES ($N = 263$) or (2) Standard Care ($N = 263$) in a multisite trial conducted in eight prison substance abuse programs. Along with NDRI (the lead organization), the collaborating study sites were the University of California, Los Angeles, Temple University, and University of Kentucky. Aim 1 was to test the comparative effectiveness of TES vs. Standard Care at 3- and 6-months post-prison discharge on measures of drug use (e.g., weeks of abstinence), HIV risk behavior (both sex-related and drug-related), and reincarceration rates.

Aim 2 was to evaluate the cost and cost-effectiveness of TES relative to standard care.

Computerized Psychosocial Treatment for Offenders with Substance Use Disorders was funded by a subaward from the National Development and Research Institutes, Inc., under grant RC2DA028967 from the National Institute on Drug Abuse, from September 2009 to August 2012.

Effectiveness of Residential vs. Intensive Outpatient Prison-Based Treatment

William Burdon, Ph.D., Principal Investigator
(wburdon@ucla.edu)

The purpose of this 5-year study was to (1) assess the differential clinical effectiveness and cost-effectiveness of long-term residential (LTR) treatment versus intensive outpatient (IOP) treatment in a prison-based treatment setting and (2) determine whether one treatment modality was more effective than the other for drug-involved offenders matched to the appropriate modality (e.g., based on risk level and/or substance abuse severity). Eight hundred inmates (600 males and 200 females) who received referrals to enter prison-based substance abuse treatment were randomly assigned to either LTR or IOP treatment. Inmates who were randomly assigned to LTR treatment began treatment no later than 9 months prior to their scheduled release date. Inmates who were randomly assigned to IOP treatment began treatment approximately 3 months prior to their scheduled release from prison. Treatment for both groups continued until they were released from prison. Study participants were assessed in face-to-face interviews at baseline and immediately prior to discharge from the treatment programs and release from prison. Twelve-month post-release follow-up interviews were also conducted. Data on community treatment participation (e.g., modality, intensity, and duration of treatment) were obtained directly from the community provider. In addition, the Washington State Department of Corrections (WSDOC) provided records-based data on post-release treatment participation, illicit drug use (i.e., results of drug tests), and return-to-custody for all individuals who received in-custody IOP and LTR treatment. This project was conducted in collaboration with the Washington State Department of Corrections (WSDOC) and CiviGenics, Inc., the sole provider of

treatment services for inmates in the Washington State prison system.

Effectiveness of Residential vs. Intensive Outpatient Prison-Based Treatment was funded by the National Institute on Drug Abuse, Grant 1 R01 DA020621 (September 2006 to May 2011).

Enhancing Substance Abuse Treatment Services for Women Offenders

Nena Messina, Ph.D., Principal Investigator
(nmessina@ucla.edu)

Maria Zarza, Ph.D., Project Director
(September 2005 to September 2007)

Stacy Calhoun, M.A., Project Director
(September 2007 to 2010)

This 3-year study examined Mental Health Systems, Inc.'s (MHS), readiness and capacity for practice improvement as it incorporated women-focused treatment into four MHS program sites serving female drug-court participants. This study also included an experimental component to determine the relative effectiveness of a women-focused (WF) treatment program based on relational theory, compared to the standard mixed-gender (MG) outpatient treatment program delivered to women offenders deferred from incarceration through drug court to promote positive behaviors (e.g., reducing criminal offending and substance abuse) and improve psychological functioning. The WF curricula had been fully developed by Stephanie Covington (i.e., *Helping Women Recover and Beyond Trauma*); however, this was the first empirical test of the curricula in a community treatment setting. Specifically, 150 women participating in four MHS drug court programs in San Diego, California, were randomly assigned to the WF or MG treatment program groups. The proposed study had the following specific aims:

1. To identify and address barriers to coordinating and integrating new and appropriate WF services, including HIV prevention, for substance-dependent women offenders;
2. To coordinate and integrate a theoretically based women-focused protocol into the existing MHS program curriculum;

3. To develop effective fidelity measures to assess staff performance, adherence, and retention to the newly integrated curriculum;
4. To pilot test the efficacy of the theoretically based, multi-faceted, WF curriculum to promote positive behaviors among women offenders, compared to the impact of the standard MG program;
5. To qualitatively assess women's perceptions of their treatment experience, comparing those of women in the newly integrated WF program with those of women in the standard MG program.

Findings

Findings from the staff focus groups revealed that the facilitators were very supportive of implementing the WF curriculum in their drug court treatment program and showed a strong willingness to be trained in the new curriculum. However, they were concerned that they were not trained enough to deal with traumatic events that might come up in group. In particular, they were worried about "opening a can of worms" and being unable to resolve the situation before a session is finished and thereby placing the client at risk for using again. Findings indicate the need to provide the counselors with an on-site experienced clinician to help them deal personally and professionally with their daily work.

Results from the experimental component of the study showed that the WF participants had significantly better in-treatment performance, more positive perceptions related to their treatment experience, and positive trends indicating reductions in PTSD symptomatology. Both groups improved in their self-reported psychological well-being and reported reductions in drug use (this comparison approached significance, $p < .06$), and arrest (a diagnosis of PTSD was the primary predictor of reductions in re-arrest, $p < .04$). Findings show the beneficial effects of treatment components oriented toward women's needs. Significant questions remain, particularly around PTSD and whether these symptoms should be targeted to improve substance use outcomes for women offenders.

Enhancing Substance Abuse Treatment Services for Women Offenders was funded by Mental Health Systems, Inc., grant 720 (R01 DA022149), from September 2005 to July 2010.

Evaluation of Illness Management & Recovery (IMR) Project at Substance Abuse Treatment Facility at Corcoran State Prison

*Christine E. Grella, Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)
Jerry Cartier, M.A., Project Director*

ISAP is conducting an initial process evaluation of the Illness, Management, and Recovery (IMR) project at the Substance Abuse Treatment Facility (SATF) at the California state prison at Corcoran. The IMR project provides an integrated treatment program for male offenders with serious mental disorders and co-occurring substance use disorders. An interdisciplinary treatment team will provide at least 10 hours of programming per week, as well as substance abuse treatment that consists of several evidence-based interventions (i.e., cognitive behavioral therapy, motivational interviewing, and dialectical behavioral therapy). The IMR intervention employs a range of strategies to teach participants skills to cope with and manage their symptoms as well as skills for relapse prevention. Participants will also receive aftercare planning so that they are linked with substance abuse treatment in the community upon their parole. The evaluation study will examine the fidelity of implementing the IMR program at the SATF, staff knowledge of and competency in the IMR core components, and the adaptations that have been made in order to deliver the IMR program within a correctional facility. This study will also develop a plan and design for a subsequent outcome evaluation study of the IMR program.

Evaluation of Illness Management & Recovery (IMR) Project at SATF was funded by the State of California Department of Corrections and Rehabilitation, contract 5600002110, from July 2012 to June 2014.

Evaluation of the P3BENEFITS Program

*David Farabee, Ph.D., Principal Investigator
(dfarabee@ucla.edu)
Elizabeth Hall, Ph.D., Co-Investigator
Joy Yang, M.P.P., Project Director*

The purpose of this evaluation was to determine the effectiveness of CDCR's Pre-Parole Process (P3) Benefits Program. The P3 program allows for the pre-release identification of inmates with special needs or health issues that entitle them to state or federal benefits. Social workers then complete the benefits paperwork on the inmates' behalf so that they are able to receive their entitled benefits immediately upon release. This 4-year study assessed the effectiveness of the P3 Benefits Program with regard to its ability to improve parolee outcomes, including lowered recidivism. In addition, Dr. Sheldon Zhang's team at San Diego State University (SDSU) Research Foundation conducted a cost analysis of the program.

Evaluation of the P3BENEFITS Program was funded by the State of California Department of Corrections and Rehabilitation, contract C08.145, from November 2008 to October 2012.

Evaluation of the Substance Abuse and Crime Prevention Act of 2000

*Darren Urada, Ph.D., Principal Investigator
(durada@ucla.edu)
Liz Evans, M.A., Project Director
Bradley Conner, Ph.D., Project Director
(January 2008 to August 2008)*

In November 2000, 61% of California voters approved Proposition 36, subsequently enacted into law as the Substance Abuse and Crime Prevention Act, or SACPA. This legislation mandated a major shift in the state's criminal justice policy. Under SACPA, nonviolent drug possession offenders may choose to receive drug abuse treatment in the community instead of being sentenced to a term of incarceration or being placed under community supervision without treatment. ISAP conducted a statewide evaluation of SACPA to examine its implementation, costs and cost-savings, and influence on offender behavior.

The evaluation examined SACPA's effect on eligible offenders and subpopulations of eligible offenders and made recommendations for improvements. The evaluation communicates findings to state and national audiences and identifies implications for criminal justice and treatment policy. (Additional information is available at www.uclaisap.org/prop36/index.html.)

Evaluation of the Substance Abuse and Crime Prevention Act of 2000 was funded by the California Department of Alcohol and Drug Programs, contracts 06-00156 and 07-00152, from February 2007 to November 2007 and January 2008 to December 2010.

Publications stemming from this study include:

- Evans, E., Longshore, D., Prendergast, M., Urada, D. (2006). Evaluation of the substance abuse and crime prevention act: client characteristics, treatment completion and re-offending three years after implementation. *Journal of Psychoactive Drugs SARC Suppl. 3*, 357-368.
- Anglin, M.D., Urada, D., Brecht, M.L., Hawken, A., Rawson, R., & Longshore, D. (2007). Criminal justice treatment admissions for methamphetamine use in California: A focus on proposition 36. *Journal of Psychoactive Drugs*, SARC Supplement No 4, 367-381.
- Evans, E., Anglin, M.D., Urada, D., & Yang, J. (2011). Promising practices for delivery of court-supervised substance abuse treatment: Perspectives from six high-performing California counties operating Proposition 36. *Evaluation and Program Planning*, 34: 124-134. PMID: 20965568.
- Urada, D., Gardiner, C., & Anglin, M.D. (2011). Stakeholder consensus and circumvention in drug diversion programs: findings from California's Substance Abuse and Crime Prevention Act (Proposition 36). *Journal of Drug Issues*, 41(1), 45-68.
- Evans, E., Li, L., Urada, D., & Anglin, M.D. (2010). Comparative effectiveness of California's drug court and Proposition 36 programs: Offender characteristics, treatment experiences, and outcomes before and after propensity score matching. *Crime & Delinquency*. DOI: 10.1177/001128710382342
- Evans, E., Jaffe, A., Urada, D., & Anglin, M.D. (2011). Differential outcomes of court-supervised substance abuse treatment among California parolees and probationers. *International Journal of Offender Therapy and Comparative Criminology*, April 24. [Epub ahead of print] PMID: 21518702
- Gardiner, C., Urada, D., & Anglin, M.D. (2011). Band-Aids and Bullhorns: Why California's drug policy is failing and what we can do to fix it. *Criminal Justice Policy Review*. [Epub ahead of print] DOI: 10.1177/0887403410397185
- Hampton, A.S., Conner, B.T., Albert, D., Anglin, M.D., Urada, D., and Longshore, D. (2011). Pathways to treatment retention for individuals legally coerced to substance use treatment: The interaction of hope and treatment motivation. *Drug and Alcohol Dependence* 118 (2011), pp. 400-407. DOI: 10.1016/j.drugalcdep.2011.04.022
- Urada, D., Rutkowski, B.A., Rawson, R.A., & Freese, T.E. (2011). Identifying and assessing promising practices for criminal justice clients—California Substance Abuse Research Consortium (SARC) Meetings, 2010. *Journal of Psychoactive Drugs, Suppl 7*: 3-9.
- Conner, B.T., Hampton, A., Hunter, J., & Urada, D. (2011). Treating opioid use in California's Proposition 36: Differential outcomes by treatment modality. *Journal of Psychoactive Drugs, Suppl 7*: 77-83.
- Brecht, M-L & Urada, D. (2011). Treatment outcomes for methamphetamine users: California Proposition 36 and other clients. *Journal of Psychoactive Drugs, Suppl 7*, 68-76.
- Anglin, M.D., Nosyk, B., Jaffe, A., & Urada, D. (in press). Offender diversion into substance use disorder treatment: The economic impact of California's Proposition 36. *American Journal of Public Health*.

Expert Panel for the Inmate Classification Study

David Farabee, Ph.D., Principal Investigator
(dfarabee@ucla.edu)

The purpose of this study was to evaluate the California Department of Corrections and Rehabilitation's (CDCR) inmate classification system. The expert panel assisted CDCR in identifying factors that justify restrictions on liberty while avoiding factors that could lead to unwarranted impingements on inmate rehabilitation. Analyses focused on male offenders because the research design relied on the delineation between particular housing levels that are not applicable to female offenders.

Expert Panel for the Inmate Classification Study was funded by the California Department of Corrections and Rehabilitation to the University of California, Irvine, contract 20102499, from September 2010 to December 2011.

Exploring Proposition 36 as a Turning Point in Life Course Drug-Use Trajectories

Cheryl Teruya, Ph.D., Principal Investigator
(cteruya@ucla.edu)
Yih-Ing Hser, Ph.D., Co-Investigator

Rooted in the life course theory, the idea of turning points has been used to explain and characterize major changes in drug use. This qualitative study explored whether and how California's Proposition 36 (or "Prop. 36," aka the Substance Abuse and Crime Prevention Act) served as a turning point redirecting participants' drug-use trajectories. This relatively new law offers adults convicted of nonviolent drug possession offenses the opportunity to choose drug treatment in the community in lieu of incarceration or

probation without treatment. In-depth qualitative interviews were conducted with 80 participants selected from another NIDA-supported study of outcomes among Prop. 36 clients enrolled in treatment to explore if Prop. 36 has served as a turning point for these individuals and to explore their related subjective experiences. The goal of this study was to derive theory components that may account for the underlying mechanisms and developmental processes involved in turning points within the life course of drug use and generate hypotheses to test in future research studies.

Exploring Proposition 36 as a Turning Point in Life Course Drug-Use Trajectories was funded by the National Institute on Drug Abuse, grant 1 R03 DA025291, from May 2009 to April 2012.

Gender-Responsive Treatment for Women Offenders

*Michael Prendergast, Ph.D., Principal Investigator
(mlp@ucla.edu)*

*Nena Messina, Ph.D., & Elizabeth Hall, Ph.D.,
Co-Investigators*

This 5-year study was designed to determine whether drug abuse treatment programs designed specifically for women offenders result in better outcomes than do mixed-gender programs. Consistent findings regarding the greater severity of women's drug abuse, past trauma, and psychological disorders have led many researchers to advocate the use of gender-responsive treatment for women as a more appropriate and effective way to facilitate their recovery. As policymakers and treatment providers consider expanding treatment options for women offenders, it is critically important to determine whether women-only (WO) treatment programs do produce better outcomes than standard mixed-gender (MG) programs. This study involved the cooperation of community-based drug abuse treatment agencies providing Drug Court, Substance Abuse Crime and Prevention Act (SACPA, or Prop. 36), perinatal, and other outpatient treatment within Los Angeles County. The study used a quasi-experimental design with study intake into two treatment conditions (MG vs. WO) and had the following specific aims: (1) To evaluate the impact of WO programs on drug use, criminal activity, and social functioning (e.g., employment, education, parenting behavior) for women offenders, compared to the

impact of MG programs, and (2) To qualitatively assess women's perceptions of their treatment experiences in the WO and MG treatment programs. Using a propensity-score approach to balance the two groups on baseline characteristics, analysis indicated that at 12-months following treatment entrance, women who participated in WO programs were significantly less likely to use drugs and to commit crimes than were women in MG programs, but the groups did not differ significantly on arrest and employment.

For more information, please see:

Prendergast, M., Messina, N., Hall, E., & Warda, U. (2011). The relative effectiveness of women-only versus mixed-gender substance abuse treatment. *Journal of Substance Abuse Treatment, 40*(4), 336-348. (PMCID: PMC3081899)

Gender-Responsive Treatment for Women Offenders was funded by the National Institute on Drug Abuse, grant 1 R01 DA016277, from September 2004 through August 2010.

Mental Health Characteristics and Service Utilization of Substance-Abusing Offenders in California

*Christine E. Grella, Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)*

Mary-Lynn Brecht, Ph.D., Co-Investigator

This study compared participants with and without co-occurring substance use and mental disorders (COD) who were referred to substance abuse treatment through Proposition 36 (Prop. 36) in California, which allows non-violent drug offenders to go to treatment instead of prison. Administrative data on mental health diagnoses of Prop. 36 participants were linked with data on their treatment participation and arrests within 12 months of their eligibility for participation. Participants with COD ($N = 2,526$, 15.9%) and without ($N = 13,385$; 84.1%) in 2001-02 were compared on their background characteristics, treatment participation, and criminal justice outcomes. Primary diagnoses of participants with COD were mood disorder (42%), psychotic disorder (31%), anxiety disorder (6%), drug use disorder (13%), and "other type of disorder" (9%). Less than one-fifth of these participants were

identified with COD in the substance abuse treatment system. Among participants with COD, there were higher proportions of Whites (54% vs. 49%), women (36% vs. 23%), heroin users (16% vs. 12%), homeless individuals (19% vs. 12%), and individuals not in the labor force (50% vs. 37%), and fewer Hispanics (24% vs. 30%). Offenders with COD appear to be a more severe population (e.g., not in the labor force, injection drug users, more prior substance abuse treatment episodes). Moreover, they were more likely to be arrested in the 12 months following referral to Prop. 36 as compared with those without COD. Individuals with the highest rate of mental health service use over time had the lowest number of arrests following referral to Prop. 36; this difference was most pronounced with regard to arrests for drug-related crimes. Study findings suggest the need to better identify Prop. 36 participants with COD and coordinate their service use across treatment systems, as well as the need to incorporate strategies for retaining this subpopulation in services over time.

Mental Health Characteristics and Service Utilization of Substance-Abusing Offenders in California was funded by the National Institute of Mental Health, grant 1 R03 MH080874, from August 2008 to May 2010 (no-cost extension through May 2011).

Pacific Coast Research Center of CJ-DATS2

Michael Prendergast, Ph.D., Principal Investigator
(mlp@ucla.edu)

Patricia Noble-Desy, M.A., Criminal Justice Co-Investigator

David Farabee, Ph.D., Co-Investigator

William Burdon, Ph.D., Co-Investigator

Elizabeth Hall, Ph.D., Center Administrator

The Pacific Coast Research Center (PCRC) is part of a nationwide network of research centers involved in NIDA's Criminal Justice – Drug Abuse Treatment Research Studies (CJ-DATS). The Pacific Coast Research Center brings together researchers from a broad array of disciplines with experience in criminal justice, drug abuse, and implementation research. The PCRC also partners with criminal justice agencies in Washington and New Mexico. Currently, CJ-DATS focuses on the problems of implementing research-based drug treatment practices. This research concerns the organizational and systems

processes involved in implementing valid, evidence-based practices to reduce drug use and drug-related recidivism and health problems for individuals in the criminal justice system. Adopting new evidence-based practices often requires substantial commitment from an organization, including evaluating the evidence supporting the new practice, determining which organizational changes are needed to adopt the new practice, hiring and training staff, and allocating time and resources to successfully implement the new clinical practice. Approaches to successfully implement and sustain research-based treatment services and practices have received little rigorous study in the context of drug abuse treatment for offenders with substance use disorders. Nine CJ-DATS Research Centers are conducting research in three primary domains:

- Improving the implementation of evidence-based assessment processes for offenders with drug problems
- Implementing effective medication-assisted treatment for drug-involved offenders
- Implementing evidence-based interventions to improve an HIV continuum-of-care for offenders.

For more information, please visit <http://www.uclapcrc.org/html/about.html>.

Pacific Coast Research Center of CJ-DATS2 was funded by the National Institute on Drug Abuse, grant 2 U01 DA16211, from April 2009 to March 2014.

Project BRITE: Behavioral Reinforcement to Increase Treatment Engagement

William Burdon, Ph.D., Principal Investigator
(wburdon@ucla.edu)

Michael L. Prendergast, Ph.D., Co-Investigator

Project BRITE (1) tested the impact of a behavioral reinforcement intervention on inmate engagement in prison-based substance abuse treatment, and (2) assessed the process by which this evidence-based innovation was implemented and sustained within prison-based treatment programs, within the context of Diffusion of Innovations theory. This theory explains the process by which innovations are communicated to and adopted

by individuals within a social system or organization over a period of time. Male and female inmates ($N = 260$) receiving referrals to intensive outpatient treatment were randomly assigned to one of two types of programs (i.e., conditions): behavioral reinforcement (BR) or standard treatment (ST). Inmates assigned to the BR programs received positive behavioral reinforcement contingent upon their attendance and participation in regularly scheduled program activities. Reinforcement was in the form of Motivational Incentive (MI) points that could be redeemed for commissary items and/or privileges or donated to a “community charity” (a measure of altruism). Subjects were interviewed at baseline and upon discharge from the programs. Records-based data was collected on aftercare participation, drug use, and reincarceration 9 months following release from prison. This project was conducted in collaboration with the Washington State Department of Corrections and CiviGenics, Inc.

Project BRITE was funded by the National Institute on Drug Abuse, grant 1 R01 DA017856-01 (July 2005 through June 2011).

Screening, Brief Intervention, and Referral to Treatment (SBIRT) with Offenders

Michael Prendergast, Ph.D., Principal Investigator
(mlp@ucla.edu)
Jerome (Jerry) Cartier, M.A., Project Director

Inmates will be recruited at two Los Angeles County Sheriff jail facilities, one for men and one for women (25% of total sample), and randomly assign them to the treatment (SBIRT) group ($N = 400$) or to the control (no intervention) group ($N = 400$). Baseline demographic data will be collected. Subjects in both groups will be screened for substance use risk using *The Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)* developed by the World Health Organization. Control subjects will receive only their risk score and informational materials regarding the health risks of substance use. Experimental subjects, in addition to their risk score and informational materials, will receive a brief intervention and a referral to treatment appropriate to their risk score. Twelve months after study admission, all study participants will be contacted for a follow-up interview. We will obtain records-based data on arrests and jail incarcerations

over the follow-up period from the California Department of Justice and also collect subject participation in publicly funded treatment from the Substance Abuse Prevention and Control Division of the Los Angeles County Department of Health. The primary outcome measure for this study is a reduction in the use of drugs and alcohol and the secondary outcomes include participation in treatment, rearrest and incarceration, a reduction in HIV risk behaviors, and the cost benefit of SBIRT for offenders.

Screening, Brief Intervention, and Referral to Treatment (SBIRT) with Offenders was funded by the National Institute on Drug Abuse, grant 1 R01 DA031879, from April 2012 to March 2016.

Using Incentives to Improve Parolee Participation and Retention in Community Treatment

Michael Prendergast, Ph.D., Principal Investigator
(mlp@ucla.edu)
Elizabeth Hall, Ph.D., Co-Investigator

In collaboration with Walden House and the California Department of Corrections and Rehabilitation, we are conducting a 5-year health services research study involving a randomized test of the use of incentives to improve treatment utilization among parolees in community-based treatment. The incentives are in the form of vouchers that are redeemable for goods or services. The goals of the study are to increase the likelihood that prison treatment participants with a referral to community treatment will enroll in community treatment following release to parole and, once enrolled, will increase the amount of time that they participate in treatment. Increased exposure to community treatment as a result of incentives is expected to result in improved long-term outcomes of parolees who have participated in prison-based and community-based treatment.

The study's aims are to:

- Determine whether offering an incentive increases admission to community treatment.
- Determine whether providing incentives for attendance in community treatment results in greater retention.
- Determine whether providing an incentive increases

the likelihood that clients will participate in HIV testing and counseling.

- Assess the long-term impact of the use of incentives on drug use, crime, and psychosocial outcomes at 12 months following the end of the intervention.
- Assess the long-term impact of treatment attendance incentives on HIV risk behaviors.
- Assess issues of acceptability, satisfaction, and sustainability of the use of incentives among staff and clients.

Using Incentives to Improve Parolee Participation and Retention in Community Treatment was funded by the National Institute on Drug Abuse, grant 1 R01 DA025627, from August 2009 to July 2014.

Healthcare Reform and Integration of SUD Treatment with Primary Care

Evaluation, Training, and Technical Assistance for Substance Use Disorder Services Integration

Darren Urada, Ph.D., Principal Investigator
(durada@ucla.edu)

Richard Rawson, Ph.D., Co-Investigator
Valerie Antonini, MPH, Project Director

The purpose of this project is to provide evaluation, training, and technical assistance (ETTA) for substance use service integration activities within the health care system of California. From 2012 to 2015, ISAP will provide the following:

1. Examine how ongoing policy changes are affecting who receives substance use disorders (SUDs) treatment and how access, services, costs, and quality of care are being affected. Make recommendations to improve policies, practices, and data quality.
2. Refine program performance and patient outcome measures.
3. Collect and disseminate cutting-edge information on the integration of SUD services with mental health and primary care services.
4. Recommend strategic planning principles to guide the development of an integrated drug treatment delivery system in California in the context of health care reform.
5. Coordinate and facilitate an interactive forum (Learning Collaborative) with county administrators and other key stakeholders to discuss SUD integration.
6. Conduct Case Study/Pilot Evaluations.
7. Provide training at the county level on strategies to prepare for health care reform.
8. Provide technical assistance at the county level to facilitate integration following the implementation of major health care reforms in 2014.

ISAP Projects: Healthcare Reform and Integration of SUD Treatment with Primary Care

For more information, please visit <http://www.uclaisap.org/Affordable-Care-Act/index.html>.

Evaluation, Training, and Technical Assistance for Substance Use Disorder Services Integration was funded by the California Department of Alcohol and Drug Programs, contract 12-00117, from July 2012 to June 2015.

Integration of Substance Use Disorder Treatment with Primary Care in Preparation for Health Care Reform

Darren Urada, Ph.D., Principal Investigator
(durada@ucla.edu)
Cheryl Teruya, Ph.D., Co-Investigator

Research suggests that providing substance use disorder (SUD) services in health care settings is feasible, can reach many more individuals than reliance on community-based specialty SUD treatment alone, promises better outcomes for patients, and can result in reduced overall health care utilization costs. Furthermore, as a result of the Affordable Care Act, mental health and SUD treatment are expected to become more closely integrated with each other and with primary care. However, little data on the current state of integration currently exists. We conducted a small study targeting federally qualified health centers (FQHCs) using online surveys and qualitative interviews to assess SUD integration with primary care, mental health, and HIV/AIDS services in California primary care settings. **Results:** Half of the organizations reported collaboration between SUD and primary care, but the other half reported only minimal or basic levels of integration. In general, SUD services are not as well integrated with primary care as mental health services are, are rated as less effective than mental health services, and are separated from primary care services physically and temporally. The difference in effectiveness appears to be due to provider training, not in attitudes toward SUD patients. Participants indicated interest in obtaining training in SUD treatment to address

this. Policy recommendations were included in the final report.

Integration of Substance Use Disorder Treatment with Primary Care in Preparation for Health Care Reform was funded by California Program on Access to Care, contract KKN06A, from October 2011 to October 2012.

Kern County Project CARE Evaluation

Richard A. Rawson, Ph.D., Principal Investigator
(rrowson@mednet.ucla.edu)
Darren Urada, Ph.D., Co-Investigator
Valerie Antonini, M.P.H., Project Director

In 2011, California's Kern County contracted with UCLA ISAP to provide evaluation, training, and technical assistance services for Project Care, which aims to integrate substance use and mental health services into primary care settings. In 2011–2012, UCLA's work with Kern County's Project Care fell into two broad categories: 1. General Integration Activities, Training, and Technical Assistance, and 2. Measures of Integration. Trainings to date have been well received and initial measures indicate increasing levels of integration at the participating sites.

Kern County Project CARE Evaluation was funded by Kern County, contracts 241-2011 and 566-2012, from May 2011 to June 2013.

HIV/AIDS

A Parenting Intervention for HIV+ Moms: The IMAGE Program

*Debra A. Murphy, Ph.D., Principal Investigator
(dmurphy@mednet.ucla.edu)
Diana Payne, Ph.D., Project Director*

The purpose of this R01 pilot study is to develop and then test the feasibility of implementing a parenting intervention for HIV-infected mothers with well children age 6–14 years old. The intervention is designed to improve parenting skills and maternal self-care skills in order to improve child and maternal outcomes. The basis for development of this intervention is work from two previous R01s (MH # 5R01MH057207) designed to longitudinally assess mothers living with HIV (MLHs) and their children. Sixty-one MLHs and their children (total $N = 122$) have been enrolled (target enrollment, $N = 120$). Of the 61 MLHs, 30 were randomly assigned to the theory-based, 4-session skills training intervention; 29 interventions have been completed. The remaining 31 MLHs were randomized to the control condition. The intervention (“Improving Mothers’ parenting Abilities, Growth, & Effectiveness”—the IMAGE program) is based on the Information – Motivation – Behavioral Skills (IMB) model of health behavior change, with specific skills selected based on our 10-year observational study of MLH and their children, an ongoing study at UCLA. MLHs and their children are assessed at baseline and 3-, 6-, and 12-month follow-ups. Three mother-child pairs have completed their final follow-up assessments. Upon completion of their follow-up assessments, a random subset of 40% of the intervention mothers ($n = 12$) will be asked to participate in an in-depth qualitative interview to obtain detailed process information on their experiences in the intervention.

A Parenting Intervention for HIV+ Moms: The IMAGE Program was funded by the National Institute of Mental Health, grant 1 R01 MH086329, from April 2010 to December 2013.

Center for HIV Identification, Prevention and Treatment Services

*Mary Jane Rotheram-Borus, Ph.D., Principal Investigator
(rotheram@ucla.edu)
Debra A. Murphy, Ph.D., Co-Investigator*

This Center comprises an interdisciplinary group from UCLA, Drew University, RAND, and the Los Angeles County community (Department of Health and community-based agencies) with the aim of enhancing understanding of HIV and promoting early detection and effective prevention and treatment programs for HIV at the societal, community, and individual levels.

Center for HIV Identification, Prevention and Treatment Services is funded by the National Institute of Mental Health, grant 5 P30 MH58107, from September 1997 through January 2017.

Longitudinal Study of Maternal HIV on their Late Adolescent/Early Adult Children

*Debra A. Murphy, Ph.D., Principal Investigator
(dmurphy@mednet.ucla.edu)
Diane Herbeck, M.A., Project Coordinator*

This study was designed to extend and expand a longitudinal study (R01-MH057207-10), “Parents And Children Coping Together” (PACT). The original study was designed to longitudinally assess mothers living with HIV (MLHs) and their young, well children 6 to 11 years old. Five follow-up interviews were conducted at 6-month intervals in the PACT study. A subsequent longitudinal study, “Parents and Adolescents Coping Together” (PACT II), followed up the majority of these families when the children were transitioning to early and middle adolescence; there were 6 follow-ups. This study (“PACT III”) continued to follow the MLHs and adolescents one last time, to investigate outcomes as the adolescents transition to late adolescence/young adulthood. Both qualitative and quantitative interviews at 7 time-points were conducted. This is the first cohort of children in the United States to be followed almost continuously as they

grow up to adulthood while living with a mother with HIV/AIDS. Further description of the study can be found in the following publications:

Murphy, D.A., Marelich, W.D., Herbeck, D.M. (2012). Impact of maternal HIV health: A 12-year study in the Parents and Children Coping Together project. *Journal of Adolescent Health, 51*(4), 313-318. PMID: 22999830

Marelich, W.D., Murphy, D.A., Payne, D.L., Herbeck, D.M., & Schuster, M.A. (2012). Self-competence among early and middle adolescents affected by maternal HIV/AIDS. *International Journal of Adolescence and Youth, 17*(1), 21-33. PMID: 22485061

Murphy, D.A., Roberts, K.J., & Herbeck, D.M. (2012). HIV-positive mothers' communication about safer sex and STD prevention with their children. *Journal of Family Issues, 33*(2), 136-157. PMID: 22368316

Murphy, D.A., Herbeck, D.M., Marelich, W.D., & Schuster, M.A. (2010). Predictors of sexual behavior among early and middle adolescents affected by maternal HIV. *International Journal of Sexual Health, 22*, 195-204. PMID: 21998620

The Longitudinal Study of Maternal HIV on their Late Adolescent/Early Adult Children was funded by the National Institute of Mental Health, grant R01 MH57207-11, from 2008 to 2013

Trajectories of HIV Sexual Risks: Impacts of Drug Use, Mental Health, and Criminality

David Huang, DrPH, Principal Investigator
(yhuang@ucla.edu)

Debra A. Murphy, Ph.D., Co-Investigator
Yih-Ing Hser, Ph.D., Co-Investigator

H. Isabella Lanza, Ph.D., Project Director
(hilanza@ucla.edu)

The purpose of this research was to conduct extensive analyses on a national representative sample of youth (NLSY97) to identify distinctive trajectories of HIV sexual risk behaviors and examine how the distinctive trajectories are influenced by drug use, mental health, delinquency, and other factors. We focused on the following research questions: (1) Are there subgroups of individuals with distinctive patterns of sexual-risk trajectories, and how do women and men differ in these patterns? (2) What factors distinguish different sexual-risk trajectories? and (3) How are sexual-risk trajectories associated with alcohol use, marijuana use, and delinquency over time?

The study identified five distinctive sexual-risk trajectory patterns across adolescence and young adulthood (ages 15 to 23). The High group had a risk trajectory that was high at age 15 and increased over the observed ages. The Decreased group had a risk trajectory that accelerated before age 19, but decreased afterwards. The risk trajectories of the Increased-Early and Increased-Late groups were low at age 15, but increased significantly starting at age 16 for the former group and at age 18 for the latter group. Participants in the Low group remained at low risk over time. The findings support the concept that sexual risk behavior is dynamic and that there are distinct developmental trajectories of such behavior among adolescents. Heterogeneity of developmental trajectories of sexual risk behavior indicates a need for diverse prevention programs targeted to various subgroups. Publications from this study are:

Huang, D., Murphy, D.A., & Hser, Y.I. (2011). Developmental trajectory of sexual risk behaviors from adolescence to young adulthood. *Youth and Society, 44*(4), 479-499. NIHMS: 290394.

Huang, D., Murphy, D.A., & Hser, Y.I. (2011). Parental monitoring during early adolescence deters adolescent sexual initiation: Discrete-time survival mixture analysis. *Journal of Child and Family Studies, 20*(4), 511-520. NIHMS: 234642.

Huang, D., Lanza, H.I., Murphy, D.A., & Hser, Y.I. (2012). Parallel development of risk behaviors in adolescence: Potential pathways to co-occurrence. *International Journal of Behavioral Development, 36*(4), 247-257.

Lanza, H.I., Huang, D., Murphy, D.A., & Hser, Y.I. (in press). A latent class analysis of maternal responsiveness and autonomy-granting in early adolescence: Prediction to later adolescent sexual risk-taking. *Journal of Early Adolescence*.

Trajectories of HIV Sexual Risks: Impacts of Drug Use, Mental Health, and Criminality was funded by the National Institute of Mental Health, grant 1 R03 MH084434, from June 2009 to May 2011.

International Research and Training

Drug Demand Reduction Initiative for Iraq

*Richard A. Rawson, Ph.D., Principal Investigator
(rarrowson@mednet.ucla.edu)*

SAMHSA, in collaboration with the U.S. State Department's Bureau of International Narcotics and Law Enforcement Affairs, awarded ISAP this grant to support the Iraqi Ministry of Health in establishing a sustainable and functional Center of Excellence on Substance Abuse Services at Baghdad's Medical City Complex. This project strengthened the substance use disorder treatment and prevention capacity in Iraq. Funds were used by ISAP to develop training programs and technical assistance in screening, brief intervention, and referral to treatment (SBIRT), as well as medication strategies and organizational and supervisory responsibilities. Along with ISAP, the project's subcontracted organizations, Cairo University, SKOUN Lebanese Addictions Center, and Inova Fairfax Hospital in Virginia, trained a core group of Iraqi medical professionals to disseminate clinical and research expertise into substance use disorder service systems throughout Iraq. In addition, a Community Epidemiology Workgroup was established to monitor drug trends in Iraq

Drug Demand Reduction Initiative for Iraq was funded by the Substance Abuse and Mental Health Services Administration, grant 1 U79 T1023450, from August 2011 to November 2012.

Improving Methadone Maintenance Treatment Compliance and Outcomes in China

*Yih-Ing Hser, Ph.D., Principal Investigator
(yhser@ucla.edu)*

Elizabeth Evans, M.A., Project Director

This study was a collaboration between the UCLA Integrated Substance Abuse Programs (ISAP), the Shanghai Mental Health Center (Co-PI: Min Zhao, M.D., Ph.D), and the Yunnan Institute for Drug Abuse (Co-PI: Jianhua Li, Ph.D.). Motivational incentives (MI; a form of

contingency management) have been well researched and proven efficacious by many studies conducted in Western countries. This study evaluated the efficacy of using an MI intervention to reduce treatment dropout and opiate use in methadone maintenance treatment (MMT) in China. The study had two phases. The goal of the developmental phase was to adapt study protocols and assessment questionnaires to the local community via input from focus group participants and community advisory board members. The second phase was a pilot-test of the MI intervention in several MMT clinics located in Shanghai and Kunming and involving 320 MMT patients. For more information, visit <http://uclaisap.org/InternationalProjects/html/china/index.html>.

Relevant publications are:

Hser, Y.I., Li, J., Jiang, H., Zhang, R., Du, J., Zhang, C., Zhang, B., Evans, E., Wu, F., Chang, Y.J., Peng, C., Huang, D., Stitzer, M.L., Roll, J., & Zhao, M. (2011). Effects of a randomized contingency management intervention on opiate abstinence and retention in methadone maintenance treatment in China. *Addiction*, 106(10): 1801-1809.

Hser, Y., Du, J., Li, J., Zhao, M., Chang, Y.J., Peng, C.Y., & Evans, E. (in press). Hepatitis C among methadone maintenance treatment patients in Shanghai and Kunming, China. *Journal of Public Health*.

Improving Methadone Maintenance Treatment Compliance and Outcomes in China was funded by the National Institute on Drug Abuse, grant 1 R21 DA025252, from August 2008 to July 2010.

It Came from the North: Estimating the Production of Synthetic Drugs in Quebec, Canada

*David Farabee, Ph.D., Principal Investigator
(dfarabee@ucla.edu)*

*Carlo Morselli, Ph.D. (University of Montreal) &
Sheldon Zhang, Ph.D. (San Diego State University),
Co-Investigators*

The primary focus of this study is to estimate the size of synthetic drug production (methamphetamine in particular) in Quebec, Canada, assess its export potential, and explore implications for counter-narcotics policies. Official reports from both countries and the United Nations

suggest that Canada is becoming a major global supplier of synthetic drugs. But little empirical research has been conducted to verify these claims or to estimate the size of the drug trade. Estimating the production and trafficking of any illicit drugs is a daunting endeavor because conventional sampling or statistical procedures are inadequate. In this study, we apply the capture-recapture sampling and multiple data sources to gauge this “hidden market” and its impact on the U.S. drug market.

It Came from the North: Estimating the Production of Synthetic Drugs in Quebec, Canada, was funded by the National Institute of Justice, grant 2010-IJ-CX-0020, from January 2011 to December 2013.

Reducing HIV/AIDS and Drug Abuse: Linking Compulsory Rehabilitation to Methadone Maintenance

*Yih-Ing Hser, Ph.D., Principal Investigator
Elizabeth Evans, M.A., Project Director*

This project was a collaboration between the UCLA Integrated Substance Abuse Programs (ISAP) and the Shanghai Mental Health Center (Co-PI: Min Zhao, M.D., Ph.D) to develop and pilot-test a Recovery Management Intervention (RMI) program for heroin addicts released from compulsory rehabilitation in China. The study explored the effectiveness of the intervention in improving transition to the community and access to methadone maintenance treatment. For more information, visit <http://uclaisap.org/InternationalProjects/html/china/index.html>.

Reducing HIV/AIDS and Drug Abuse: Linking Compulsory Rehabilitation to Methadone Maintenance was funded by the National Institute on Drug Abuse, grant 1 R21 DA025385, from September 2008 to August 2010. The project had a no-cost extension through 2011.

Vietnam HIV-Addiction Technology Transfer Center: VHATTC

*Richard A. Rawson, Ph.D., Principal Investigator
(rrowson@mednet.ucla.edu)
Valerie Pearce Antonini, M.P.H., Project Director*

Vietnam is experiencing an HIV epidemic due, in large part, to injection drug use. Ongoing training and workforce development in the areas of substance use disorders (SUDs) and HIV is needed. An organizational resource for workforce development used in the United States for over 15 years, the Addiction Technology Transfer Center [ATTC], is being translated and applied in Vietnam (Vietnam HIV-ATTC). The VH-ATTC was established in September 2011 at Hanoi Medical University (HMU) as a vehicle to disseminate evidence-based SUD and HIV treatment and prevention practices. The program will conduct training programs for counselors and medical professionals; develop partnerships between HMU, government and NGO leaders, policymakers, and health professionals; and promote the principles of harm reduction and recovery-oriented systems of care. The VH-ATTC will draw upon the expertise of the U.S. ATTC as well as the tremendous amount of training and advocacy work conducted by HMU, Family Health International (FHI), the World Health Organization (WHO), and the United Nations Office on Drugs and Crime (UNODC). In its first year of implementation, the VH-ATTC has established an accepted identity as a key training and technical assistance resource among the organizations delivering SUD and HIV services and governmental agencies in Vietnam. For more information, visit <http://www.uclaisap.org/vattc/index.html> or <http://uclaisap.org/InternationalProjects/html/vietnam/index.html>.

Vietnam HIV-Addiction Technology Transfer Center: VHATTC was funded by the Substance Abuse and Mental Health Services Administration, grant 1 UD1 TI023603, from September 2011 to August 2014.

Natural History / Treatment Process and Outcomes

A Comparison of Methadone Treatment Systems in California and British Columbia

*Bohdan Nosyk, Ph.D., Principal Investigator
(bnosyk@cfenet.ubc.ca)*

*David Huang, Libo Li, Darren Urada, Richard A. Rawson,
M. Douglas Anglin, Yih-Ing Hser, Co-Investigators
Elizabeth Evans, M.A., Project Director*

Opioid dependence is a chronic, recurrent disorder with periods of stabilization during treatment and frequent relapse into chronic use. Methadone Maintenance Treatment (MMT) has been found to be the most effective form of treatment for opioid dependence. The behavioral benefits and economic merits of maximizing access to MMT are well-established; increased access to quality MMT may also help contain the spread of HIV among injection drug users. Differences in drug treatment and criminal justice policies in California and British Columbia likely result in disparate health and economic outcomes for opioid-dependent individuals in these jurisdictions. Our broad objective is to quantify these differences to determine the effects of actual and simulated policies and practices and how they are manifested in the long-term in these contrasting regions. Simulation modeling provides the advantage of being able to determine how specific policies and practices impact health benefits and costs, holding other factors constant. The respective drug treatment systems and the policies shaping them will be described through a series of state/province-level individually linked administrative databases on drug treatment and other health resource utilization, arrests and other criminal justice system involvement, and vital statistics. We expect that the model can subsequently be used as a tool by these and other jurisdictions to study hypothetical effects of policy changes on opioid treatment systems and the clients they serve.

A Comparison of Methadone Treatment Systems in California and British Columbia was funded by the National Institute on Drug Abuse, grant 1 R01 DA031727, from July 2011 to April 2014.

Center for Advancing Longitudinal Drug Abuse Research (CALDAR)

*Yih-Ing Hser, Ph.D., Principal Investigator
(yhser@ucla.edu)*

*Mary-Lynn Brecht, Ph.D., Christine E. Grella, Ph.D.,
Debra A. Murphy, Ph.D., Michael Prendergast, Ph.D., &
Constance Weisner, Dr.P.H., M.S.W., Co-Investigators
Cheryl Teruya, Ph.D., Project Director*

The overarching theme of the UCLA Center for Advancing Longitudinal Drug Abuse Research (CALDAR), a multidisciplinary research unit, is the development and application of rigorous scientific approaches for advancing longitudinal research on substance abuse and its interplay with HIV infection, substance abuse treatment, and other service systems. The aims of CALDAR are to: (1) increase knowledge of longitudinal patterns of drug addiction and their interplay with HIV infection, drug treatment, and other service systems (e.g., mental health, criminal justice, welfare, medical care); (2) enhance the quality and efficiency of research conducted by Center-supported projects by providing centralized support to serve common project functions; (3) provide opportunities for scientific collaboration and cross-project analyses, stimulating conceptual development and integration, and advancing improved research methodologies and statistical approaches; and (4) enhance the relevance and application of longitudinal research on drug use by facilitating dissemination of integrated project findings to a variety of communities. Infrastructure and activities of the Center are designed to provide intensive training for enhancing the conceptualization of and methodological approaches to conducting longitudinal research, and to disseminate empirical findings on life-course drug-use trajectories and their interplay with social and service systems. Special emphasis is placed on minority and/or underserved populations, who often carry a disproportionate burden of the social problems related to substance abuse and HIV/AIDS. The Center hosts the biennial CALDAR Summer Institute on Longitudinal

Research Findings and Methods. Additional information is available at www.CALDAR.org.

The Center for Advancing Longitudinal Drug Abuse Research was funded by the National Institute on Drug Abuse, Grant 5 P30 DA016383, from September 2005 through August 2015.

The CALDAR Institute on Longitudinal Research Findings and Methods was funded by the National Institute on Drug Abuse, Grant 5 R13 DA024494, from January 2008 through December 2012.

Expectations of “Recovery” – Changes Associated with Seeking and Entering Treatment

Adi Jaffe, Ph.D., Principal Investigator (adi@ucla.edu)

This project provides a pilot of an online treatment-seeking system as well as evaluating recovery-relevant behavior, attitudes, and knowledge over the 6-month period immediately following initial treatment seeking.

Expectations of “Recovery” – Changes Associated with Seeking and Entering Treatment was funded by the National Institute on Drug Abuse, grant 5 P30 DA016383, from September 2010 to August 2015.

Four Models of Telephone Support for Stimulant Recovery

*David Farabee, Ph.D., Principal Investigator
(dfarabee@ucla.edu)*

*Richard Rawson, Ph.D., & Mitchell Karno, Ph.D.,
Co-Investigators*

Valerie Pearce, MPH, Project Director

Sarah Cousins, B.S., B.A., Project Coordinator

The purpose of this study was to develop and compare the efficacy of four low-cost, telephone support protocols for patients who completed the intensive phase of a structured, outpatient stimulant abuse treatment protocol. Patients ($N = 300$) who had successfully completed a Primary Outpatient model of stimulant abuse treatment were randomly assigned to one of five aftercare counseling conditions: (1) unstructured/non-directive, (2) unstructured/directive,

(3) structured/non-directive, (4) structured/directive, or (5) standard referral to aftercare without telephone counseling (control). The two structured conditions were based on the behavioral “prompts” identified by Farabee et al. (2002) as being associated with drug avoidance. In the non-directive conditions, patients stated their own goals and how they intended to achieve them. In the directive conditions, the coaches provided specific recommendations for the adoption of as many drug-avoidance activities as possible. Certain patient personality traits or styles were also assessed for their possible interaction with the telephone counseling dimensions. Outcomes were tracked at 3 and 12 months following completion of primary treatment and included measurement of participation in drug-avoidance activities (including aftercare participation), as well as self-reported and objective measures of substance use and associated prosocial behavior change.

Four Models of Telephone Support for Stimulant Recovery was funded by the National Institute on Drug Abuse, grant 1 R01 DA018208, from August 2005 through July 2010.

Methamphetamine Abuse: Long-Term Trajectories, Correlates, Treatment Effects

*Mary-Lynn Brecht, Ph.D., Principal Investigator
(lbrecht@ucla.edu)*

Diane Herbeck, MA, Project Director

This project is an 8-year follow-up of 596 previously studied methamphetamine (meth) users, half recruited from drug treatment participation in Los Angeles County and half with no prior meth treatment at recruitment. As of March 2012, 438 (80%) of the 549 surviving non-incarcerated participants who agreed to be re-interviewed have completed the 8-year follow-up study. The project uses the Natural History Interview to collect detailed histories of substance use, treatment, and criminal careers; these new data combined with previously collected data will produce life-course trajectories averaging at least 28 years in duration, covering teen and adult periods. Additional data will come from administrative records from several state agencies. The sample is 35% female, 33% Hispanic, 38% non-Hispanic White, 17% African American, and 12% other ethnicity. Participants were 28-74 years of age (average 42) at the beginning of the follow-up study.

Analyses will describe the current status and extended patterns of meth and other substance use including escalation, deceleration, and possible cessation and recovery; examine drug treatment utilization patterns and their relationship to meth-use patterns; describe health morbidity and mortality; assess long-term outcomes (14 or more years) of a previously identified drug treatment episode (for the subsample recruited from treatment); and estimate cumulative social costs of meth abuse for the sample in terms of criminal activity, incarceration, and drug treatment, and health and mental health services utilization. Analysis methods will include growth models and growth mixture models. Further description of the study can be found in Bolanos et al. (2012):

Bolanos, F., Herbeck, D., Christou, D., Lovinger, K., Pham, A., Raihan, A., Rodriguez, L., Sheaff, P., & Brecht, M-L. (2012). Using Facebook to maximize follow-up response rates in a longitudinal study of adults who use methamphetamine. *Substance Abuse: Research and Treatment*, 6, 1-11.

Methamphetamine Abuse: Long-Term Trajectories, Correlates, Treatment Effects was funded by the National Institute on Drug Abuse, grant 1 R01 DA025113-01A1, from July 2009 to May 2013.

mental health service use and addiction-related outcomes. This represents a considerable gap in the literature, given the continued need to explain and reduce persistent racial/ethnic health disparities in the United States. The general aim of this study was to identify individual- and community-level determinants of mental health service use and treatment outcomes among clients of publicly funded substance abuse programs. We examined the extent to which racial/ethnic disparities in (1) mental health service use and (2) addiction-related outcomes are a function of community-level characteristics. To accomplish this goal, we conducted a secondary analysis of existing data from the California Treatment Outcome Project (CalTOP), a computer-based system developed for California to standardize assessment, monitor use of services, and support outcomes evaluation of publicly funded substance abuse treatment programs throughout the state.

Research on Racial and Ethnic Disparities in Access to Mental Health Care and Addiction-Related Outcomes among Clients of Public Sector Substance Abuse Treatment Programs in California was funded by the National Institute on Drug Abuse, grant R03 DA018762 to Drew University, with a subcontract between ISAP (Yih-Ing Hser) and Drew University, from November 2008 to August 2010.

Research on Racial and Ethnic Disparities in Access to Mental Health Care and Addiction-Related Outcomes among Clients of Public Sector Substance Abuse Treatment Programs in California

Kevin Heslin, Ph.D., Principal Investigator
Yih-Ing Hser, Ph.D., Co-Investigator
Elizabeth Evans, M.A., Project Director

Psychiatric comorbidity is highly prevalent among persons with substance abuse problems. Unfortunately, many substance abusers with psychiatric symptoms do not receive mental health services. Racial/ethnic minorities are much less likely than are Whites to use mental health or substance abuse treatment; however, the reasons for these disparities are not well understood. Previous work has not determined whether the geographic maldistribution of providers and other characteristics of poor, predominantly minority neighborhoods has an effect on

Program Evaluation

Evaluation of Horizon's Integrated AODA Treatment/HIV Services for Justice-Involved Women

Nena Messina, Ph.D., Principal Investigator

(nmessina@ucla.edu)

Kira Jeter, M.P.H., Project Director

The purpose of this SAMHSA-funded project was to expand Community Advocates - Horizons Campus' program to increase access to integrated outpatient AODA treatment and HIV services for a minimum of 600 justice-involved women, who are less likely to enter treatment through formal systems. Objectives were to: (1) increase the number of women who participate in integrated outpatient AODA/HIV services from 25 to 125 women per year; (2) enhance Community Advocates-Horizons Campus' program with research-based AODA/HIV curricula that engaged hard-to-reach women, their children, and their partners; and (3) increase the number of women and partners who receive rapid HIV testing from 90 to 200 per year. ISAP conducted the evaluation, which (1) included process and outcome components to monitor the implementation of the planned intervention and (2) measure observed changes in participants from before to after their participation in the project in the following domains of functioning: (a) alcohol and drug use; (b) parenting behaviors and family functioning; (c) quality of life and social functioning; (d) criminal behavior and legal status; (e) mental health and physical health status; (f) HIV/AIDS risk reduction behaviors; and (g) treatment and services received. The program worked with parole and probation departments in the Milwaukee area to recruit participants. Horizons' has been successful in completing follow-up interviews. Once engaged, participants continued to stay well connected to the staff and/or services offered by the program.

Evaluation of Community Advocates - Horizons Campus Integrated AODA Treatment/HIV Services for Justice-Involved Women was funded by the Substance Abuse and Mental

Health Services Administration, grant TI18592 to Community Advocates-Horizons Campus, from October 2007 to September 2012.

Evaluation of People in Progress's New Elements Treatment for Homeless Program

Richard A. Rawson, Ph.D., Principal Investigator

(rarrowson@mednet.ucla.edu)

Anne Lee, M.S.W., Project Director

ISAP conducted the process and outcome evaluations of the New Elements Treatment program, which is an intervention project provided by People in Progress. The project was funded by a 5-year grant from the Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. New Elements provides comprehensive substance abuse treatment and case management services to homeless individuals. The evaluation study tracked the characteristics of project participants and examined the delivery of project-specific services, adherence to the treatment models, barriers encountered in project implementation, and solutions devised to address those barriers. Focus groups with project participants and interviews with project staff were conducted in order to monitor their respective perceptions and experiences of the project; feedback was provided from the evaluation in order to refine the project implementation. Findings from client focus groups conducted during the project consistently revealed that NECT participants felt positive about their experience in NECT in regard to the services received and their interaction with the director, case managers, and staff. At follow-up, a greater proportion of NECT clients reported higher rates of abstinence from alcohol or illegal drugs, fewer arrests, higher rates of employment/education, increased social connectedness, and stable housing. Additionally, a greater proportion of NECT clients had stable housing compared to the proportion at intake, and they exhibited less psychological distress over time.

Evaluation of People in Progress New Elements Treatment for Homeless Program was funded by People in Progress, Contract 20071053, from November 2006 to October 2011.

Evaluation of the Bridges to Housing Project

*Christine E. Grella, Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)
Kira Jeter, M.A., Project Director*

The Bridges to Housing project aims to assist individuals with a history of chronic homelessness and co-occurring mental disorders with transitioning to stable housing and securing benefits that will promote increased stability of functioning. The project, led by the CLARE Foundation in Santa Monica, is based on a collaborative community partnership model and the *Housing First* approach to eradicating homelessness among individuals who are most in need. In addition to comprehensive case management services, the intervention will incorporate several evidence-based practices, including integrated care for co-occurring disorders, motivational interviewing, cognitive behavioral therapy, and assertive case management. The project will recruit 30 participants each year who will receive collaborative case management through the community partnership. ISAP is conducting the process and outcome evaluation of *Bridges to Housing* and will focus on (1) successful implementation of the community collaboration model and evidence-based practices, recruitment of the target population, and staff attitudes and beliefs, and (2) outcomes of the 6-month follow-up regarding participants' substance use, psychosocial functioning, housing stability, and benefits status.

Evaluation of the Bridges to Housing Project was funded by the CLARE Foundation, contract 20114621, from September 2011 to September 2014.

Evaluation of the Community Bridges Project

*Christine E. Grella, Ph.D., Principal Investigator
(grella@ucla.edu)
Kira Jeter, M.A., Project Director*

The purpose of the Community Bridges Project was to strengthen and enhance the comprehensive treatment system in Santa Monica, California, for chronically homeless persons who have co-occurring mental illness and substance use disorders. Led by the CLARE

Foundation, the project was based on a model of services collaboration among community-based providers of substance abuse treatment, mental health treatment, health services, shelter and drop-in services, outreach and engagement, and transitional and permanent housing. The integrated treatment model incorporated several evidence-based practices, including motivational interviewing and relapse prevention, with the aim of (1) increasing access to treatment, (2) increasing continuity of care and services integration, (3) improving quality of life and increasing self-determination, and (4) improving levels of functioning among participants. In addition, the project aimed to increase integration of services across the participating providers, to eliminate barriers to system entry, to improve awareness of service needs for this population within the broader community, and to improve staff competencies for delivering services to this population. A total of 247 participants were recruited over 5 years. A majority of participants were cross-referred across multiple partner agencies for services, demonstrating that the project achieved its goal of implementing a collaborative community partnership model. Three outcome clusters that varied in degree of stability of functioning at follow-up were determined: (1) not stable (33.3%): clients who reported any alcohol or other drug (AOD) use in the past 30 days regardless of criminal justice involvement, housing status, or mental health status; (2) moderately stable (49.2%): clients who reported no AOD use, but who were mentally unstable and not housed, and/or had criminal justice involvement; and (3) highly stable (17.5%): clients who reported no AOD use and were either housed or mentally stable, regardless of criminal justice status.

Evaluation of Community Bridges Project was funded by the CLARE Foundation (Grant 20063816), through a grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) from September 2006 to September 2011).

Evaluation of the Homeless Co-Occurring Treatment Program

*Christine Grella, Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)
Luz Rodriguez, Project Director*

The Homeless Co-occurring Treatment Program (HCOTP) is a 4–6 month intensive outpatient treatment program that integrates substance abuse and mental health services for individuals who are in transition to permanent housing. An Assertive Community Treatment (ACT) model is used to provide integrated and comprehensive services within the context of intensive case management, referral to wrap-around and recovery support services, and motivational interviewing to increase treatment engagement. Targeted outcomes include reductions in substance use and mental health symptoms, increases in social support, and sustained residential stability. The project will serve 38 individuals per year for 5 years, for a total of 190 individuals. ISAP is conducting the process and outcome evaluation of this project, which includes client-level assessments at baseline, discharge, and 6-month follow-up; tracking of services provided to participants and their satisfaction with services; focus groups with staff and participants; and ongoing observations of the implementation process.

Evaluation of the Homeless Co-Occurring Treatment Program was funded by Special Service for Groups, contract 20104695, from September 2010 to September 2015.

Evaluation of the Liberating our Families from Drugs and Incarceration Program

*Christine E. Grella, Principal Investigator
(cgrella@mednet.ucla.edu)
Luz Rodriguez, Project Director*

ISAP conducted the evaluation of the SAMHSA-funded project “Liberating our Families from Drugs and Incarceration (LOFFDI),” which was part of the Pregnant and Parenting Women’s Treatment Initiative at the Center for Substance Abuse Treatment. The LOFFDI program was provided at the Walden House program in El Monte, CA, and the target population was women parolees

who had a history of substance use problems and who were pregnant or had young children. The program’s objectives were to improve the mental and physical health status, employment status, and parenting skills of participants so that they could successfully reintegrate into the community following their release from prison. Intensive case management services were provided within the context of residential substance abuse treatment, which included children’s services, family counseling, parenting skills training, vocational services, mental health services, trauma-related services, and referral for medical services for the women and their children. The evaluation study showed that approximately 60% of participants ($N = 110$) completed the LOFFDI treatment, compared with an average of 39% for participants in other aftercare programs for female offenders in California. Moreover, LOFFDI participants demonstrated significant improvements in their alcohol and drug use, psychological status, family functioning, employment, and quality of life at the 6-month post-discharge follow-up. Participants had a high level of satisfaction with the services received, and staff improved their competency in delivering parenting and other services over the course of project implementation. Overall, the evaluation demonstrated that LOFFDI participants improved in targeted domains that address the multiple and complex problems faced by female offenders and their families as they re-integrate into the community following parole.

Evaluation of the Liberating our Families from Drugs and Incarceration Program was funded by Walden House, Inc., contract 20064370, from October 2006 to September 2010.

Evaluation of Trauma Informed Substance Abuse Treatment (TI-SAT)

*Christine E. Grella, Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)
Nena Messina, Ph.D., Co-Investigator
Luz Rodriguez, B.A., Project Director*

The Trauma-Informed Substance Abuse Treatment (TI-SAT) program was established at the Leo Chesney Community Correctional Facility in 2008 to provide gender-responsive and trauma-informed substance abuse treatment for women offenders. The treatment approach

recognizes that childhood and adult trauma exposure is pervasive among women offenders and intricately related with their substance abuse problems. ISAP conducted an evaluation of the TI-SAT to (1) determine whether the trauma-informed treatment components were implemented as planned; (2) determine whether obstacles were encountered in the implementation process, and if so, to determine the strategies used to address these obstacles; and (3) determine the characteristics of participants, their treatment retention and aftercare participation, and their outcomes on parole. A total of 106 participants were recruited to participate in the outcome study; interviews were conducted at study intake and at 6-month follow-up. Outcome analyses examined the effects of program participation on status and functioning of participants, including their relapse to substance use, criminal behavior involvement, employment, parenting and family relationships, and overall mental health and psychosocial functioning. In addition, surveys with program staff and observational site visits were conducted to determine whether the gender-responsive and trauma-informed program components were successfully implemented. Findings demonstrated that the program components were successfully implemented and that participants in the TI-SAT had higher levels of treatment retention and aftercare participation than women in other prison-based treatment programs.

Evaluation of Trauma Informed Substance Abuse Treatment (TI-SAT) was funded by the State of California Department of Corrections and Rehabilitation, contract C08.106, from October 2008 to March 2011.

Evaluation Services to Enhance the Data Management System in California

*Richard A. Rawson, Ph.D., Principal Investigator
(rrawson@mednet.ucla.edu)
Valerie P. Antonini, MPH, Project Director
(vpearce@mednet.ucla.edu)*

A top priority of the California Department of Alcohol and Drug Programs (ADP) is to improve the accountability of the substance use disorder (SUD) treatment system in California in terms of ensuring quality services and effective client outcomes. Within this contract, ADP requested a 3-year work plan for 2009–2012 to continue

evaluation work and concepts, as defined within the previous Continuum of Services System Reengineering (COSSR) state contract (07-00176), in support of establishing a more effective SUD system in California.

Within Year 1, the work plan was focused around the following objectives:

Objective 1: Examine the California Outcomes Measurement System for SUD Treatment (CalOMS-Tx) data to enhance SUD treatment services and client outcomes in California

Objective 2: Enhance the CalOMS-Tx system to include performance measurement/management data.

Objective 3: Enhance the CalOMS-Tx system to include performance and outcome measurement in support of the COSSR model.

Objective 4: Increase the capacity of SUD stakeholders (state ADP, county administrators, and providers) to understand how to apply performance and outcome data to improving the quality of treatment services.

Within Years 2 and 3, the work plan was amended to address new priorities established following the passing of H.R. 3590 – the federal Patient Protection and Affordable Care Act, to assist the State of California and its 58 counties in their preparation for health care reform (HCR). It is anticipated that HCR will result in (among other things) modifications in how services will be funded, the types of services delivered, the venues where they are delivered, the individuals who will receive the services, the work force that delivers the services, how services are measured, and how service benefits are evaluated. The major focus of the revised work plan was to conduct data collection, data analysis, and related activities to determine models of service delivery that may facilitate this new system, and disseminate this knowledge to policy makers and practitioners across California. The tasks and activities were focused around the following topic areas:

- A. Data Systems Improvements
- B. Substance Abuse, Mental Health, and Health Care Integration
- C. Performance Measurement/Dashboards
- D. Development of Recovery Measurement and Resources
- E. Planning for Prevention
- F. Workforce Development

Reports

- 1) 2009-2010 Report: Evaluation Services to Enhance the Data Management System in California; Richard A. Rawson, Ph.D., Darren Urada, Ph.D., Valerie Pearce, M.P.H., Desirée Crèvecoeur-MacPhail, Ph.D., Allison Ober, Ph.D., Rachel Gonzales, Ph.D., Joy Yang, M.P.P., Sarah J. Cousins, B.S., B.A. and Stella M. Lee, B.A.
- 2) 2010-2011 Report: Evaluation Services to Enhance the Data Management System in California; Richard A. Rawson, Ph.D., Darren Urada, Ph.D., Valerie Pearce, M.P.H., Elizabeth Nelson, B.A., Desiree Crevecoeur-MacPhail, Ph.D., Howard Padwa, Ph.D., Umme Warda, M.S., Suzanne Spear, M.S., Allison Ober, Ph.D., and Stella M. Lee, B.A.
- 3) Substance Use Disorder Treatment Services of the Future: Technical Assistance Plan to Prepare the Workforce for Healthcare Reform, October 2011; Thomas E. Freese, Ph.D., Richard A. Rawson, Ph.D., Darren Urada, Ph.D.
- 4) Considerations for Reorganization: California's Departments of Mental Health and Alcohol and Drug Programs, August 2011; Richard A. Rawson, Ph.D. and Stella M. Lee, B.A.

Publications

- Crèvecoeur-MacPhail, D. et al, *Inside the Black Box: Measuring Addiction Treatment Services and Their Relation to Outcomes*, Journal of Psychoactive Drugs, SARC Supplement 6, September 2010.
- Ford, L., Zarate, P., *Closing the Gaps: The Impact of Inpatient Detoxification and Continuity of Care on Client Outcomes*, Journal of Psychoactive Drugs, SARC Supplement 6, September 2010.
- Harris, W., Ryan, J., *Indicated Prevention: Bridging the Gap, One Person at a Time*, Journal of Psychoactive Drugs, SARC Supplement 6, September 2010.
- Herbeck, D. et al., *Performance Improvement in Addiction Treatment: Efforts in California*, Journal of Psychoactive Drugs, SARC Supplement 6, September 2010.
- King, B et al., *A Field Experiment in Capitated Payment Systems and Recovery Management: The Women's Recovery Association Pilot Study*, Journal of Psychoactive Drugs, SARC Supplement 6, September 2010.
- Rawson et al., *Improving the Accountability of California's Public Substance Abuse Treatment System through the Implementation of Performance Models*, Journal of Psychoactive Drugs, SARC Supplement 6, September 2010.
- Stanford, M. et al., *Chronic Care and Addictions Treatment: A Feasibility Study on the Implementation of Posttreatment Continuing Recovery Monitoring*, Journal of Psychoactive Drugs, SARC Supplement 6, September 2010.

Evaluation Services to Enhance the Data Management System in California was funded by the State of California Department of Alcohol and Drug Programs, contract 09-00115, from July 2009 to June 2012.

Kern County Project CARE Evaluation

Richard A. Rawson, Ph.D., Principal Investigator
(rrowson@mednet.ucla.edu)

Darren Urada, Ph.D., Co-Investigator
Valerie Antonini, M.P.H., Project Director

In 2011, California's Kern County contracted with UCLA ISAP to provide evaluation, training, and technical assistance services for Project Care, which aims to integrate substance use and mental health services into primary care settings. In 2011–2012, UCLA's work with Kern County's Project Care fell into two broad categories: (1) General Integration Activities, Training, and Technical Assistance, and (2) Measures of Integration. Trainings to date have been well received and initial measures indicate increasing levels of integration at the participating sites.

Kern County Project CARE Evaluation was funded by Kern County, contracts 241-2011 and 566-2012, from May 2011 to June 2013.

Los Angeles County Department of Mental Health Performance Outcomes Survey

Christine E. Grella, Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)

UCLA ISAP collaborated with the Los Angeles County Department of Mental Health (DMH) Quality Improvement Division, Program Support Bureau, in conducting a countywide survey of consumers of outpatient mental health services. The survey is intended to meet the goals of the County Strategic Plan, including Performance Based Contracting. ISAP staff participated in countywide trainings of mental health service providers regarding the administration of the survey to all consumers of outpatient services, including fee-for-service providers; developed and distributed the survey forms in conjunction with the County; provided data management services of completed surveys; conducted data analyses to assess consumer satisfaction with services received, including comparisons across County regions and consumer groups; and wrote a comprehensive report on the survey findings, including recommendations for future survey design and changes

that may be made in response to survey findings on the performance outcomes.

DMH Performance Outcomes Survey was funded by the Los Angeles County Department of Mental Health, contract MH010089, from March 2012 to June 2012.

Los Angeles County Evaluation System (LACES): An Outcomes Reporting Program

Desirée Crèvecoeur-MacPhail, Ph.D., Principal Investigator (desireec@ucla.edu)
Richard A. Rawson, Ph.D., Co-Principal Investigator
M. Douglas Anglin, Ph.D., Co-Investigator

The Los Angeles County Evaluation System (LACES) is designed to assess the overall effectiveness of the county's alcohol and drug treatment/recovery system and measure the effectiveness of specific service modalities and service components. To accomplish this, LACES augmented the intake and discharge questions used by the county's alcohol and drug treatment/recovery system. The information from the revised admission and discharge questions provide information that is used to evaluate the treatment system at the county level. In addition, LACES works with the County of Los Angeles to examine its drug court, Women's Re-entry, Driving Under the Influence (DUI), and medication assisted treatment programs (MAT). The information gained from these programs, as well as the continued review of annual admission and discharge data, provides client outcome and program performance information that can be used to improve the overall substance use disorder treatment system. In addition, LACES has implemented several pilot projects in order to improve treatment engagement and retention and to assess for the "optimal" level of care. Future tasks for LACES include a follow-up of clients from the MAT study, follow-up of patients from the medical marijuana field study, and the development of report cards that will include benchmarks to improve program performance. (Additional information is available at www.laces-ucla.org.)

Los Angeles County Evaluation System (LACES): An Outcomes Reporting Program was funded by the Los Angeles County Alcohol and Drug Program Administration, Contract PH00173 (March 2004 through June 2012).

Special Populations and Topics

Brief Intervention for Alcohol Misuse Among Elderly Latino Day Laborers

Lara Ray, Ph.D., Principal Investigator (lararay@psych.ucla.edu)
Mitchell Karno, Ph.D. (karno@ucla.edu), & Alison Moore, M.D., M.P.H. (aamoore@mednet.ucla.edu), Co-Investigators

This pilot study developed a screening and brief intervention strategy designed to reduce risky alcohol use among Latino day laborers. Study staff met with day laborers to assess their current level of alcohol use and psychosocial functioning and conducted focus groups to determine participants' needs for healthcare services.

Brief Intervention for Alcohol Misuse Among Elderly Latino Day Laborers was funded by the National Institutes of Health/ National Institute on Aging, grant P30 AG021684, from July 2010 to June 2011.

Development of Childhood Obesity and High-risk Behavior Engagement in Adolescence

David Huang, Dr.P.H., Principal Investigator (yhuang@ucla.edu)
M. Douglas Anglin, Ph.D., & Kynna Wright-Volel, Ph.D., Co-Investigators
H. Isabella Lanza, Ph.D., Project Director

Childhood obesity and high-risk behaviors in adolescence (e.g., illicit drug use and delinquency) are major social issues facing the nation. Childhood obesity is associated with many and various adverse health and psychological consequences (e.g., asthma and low self-esteem). Developmental trajectories of childhood obesity and their relationship to the incidence of both concurrent and subsequent problem behaviors, especially in adolescence, have not yet been well established, in large part because prospective longitudinal studies are rarely available. Yet

systematic examination of developmental patterns of obesity in children and a better understanding of the relationship of such patterns to problem behaviors have important implications for improving youth intervention programs for a variety of problematic behaviors. This research project aimed to increase knowledge of the developmental trajectories of obesity and examine relations between childhood obesity and risk behaviors in late adolescence/young adulthood. Using the child sample initially identified in the 1979 National Longitudinal Study of Youth (NLSY79), we focused on the following research questions: (1) What are the developmental trajectories of obesity from childhood to adolescence (6 to 18 years); (2) are certain obesity trajectories associated with the development and maintenance of risk behaviors in adolescence/young adulthood; (3) which characteristics and health-risk behaviors of mothers are associated with higher risk of childhood obesity; and (4) are there gender and ethnic differences in development of obesity and associations with risk behaviors?

Development of Childhood Obesity and High-risk Behavior Engagement in Adolescence was funded by the National Institute of Child Health and Human Development, grant 1 R03 HD064619, from December 2010 to November 2012.

Drum-Assisted Recovery Therapy for Native Americans

Daniel Dickerson, D.O., M.P.H., Principal Investigator
(daniel.dickerson@ucla.edu)

Yih-Ihg Hser, Ph.D., Co-Investigator
Cheryl Teruya, Ph.D., Project Director

American Indians/Alaska Natives have the highest rates of alcohol and drug use disorders compared to other racial/ethnic groups in the United States. However, very few culturally tailored substance abuse treatment strategies have been empirically tested. Drumming is recognized as a viable healing tool for American Indians/Alaska Natives. Evidence suggests that drumming enhances substance abuse recovery as revealed in studies on physical and psychological effects. Drum-Assisted Recovery Therapy for Native Americans (DARTNA) is a culturally tailored drum therapy model for American Indians/Alaska Natives with substance abuse disorders. The purpose of this grant is to develop this treatment

protocol and to develop strategies to conduct a follow-up clinical trial. To meet these goals, the primary goals of this research project are to (1) develop and pretest a culturally tailored treatment strategy, DARTNA, for American Indians/Alaska Natives with alcohol and drug use disorders, and (2) obtain community-based input to assist in a follow-up clinical trial. Our findings will assist us in gathering data needed to develop a follow-up study to formally test the efficacy of DARTNA among American Indians/Alaska Natives with alcohol and drug use disorders.

Drum-Assisted Recovery Therapy for Native Americans was funded by the National Center for Alternative and Complementary Medicine, grant 1 R21 AT005360, from September 2010 to August 2013.

Enhancing Follow-Up Rates Through a Rechargeable Incentive Card (RIC) System

David Farabee, Ph.D., Principal Investigator
(dfarabee@ucla.edu)
Stacy Calhoun, M.A., Project Director

The purpose of this Phase I Small Business Technology Transfer (STTR) proposal was to develop a national network that supports a rechargeable incentive card (RIC) system designed to enhance follow-up rates. Specifically, the RIC System involves a debit card linked to an account in which researchers can immediately transfer funds following a follow-up contact (whether this involves telephone or in-person interviews, mail-in surveys, or provision of biological samples). The card also contains a toll-free number that subjects can use to call (as often as once a month) to notify the researchers of changes in their locator/contact information. This, too, can result in an automatic transfer of funds to the subjects' RIC System account. Developing this technology will require collaboration between the Calance Corporation and the UCLA Integrated Substance Abuse Programs (ISAP). Phase II (scale up and commercialization) began in the spring of 2012.

Enhancing Follow-Up Rates Through a Rechargeable Incentive Card (RIC) System was funded by the Calance Corporation, NIDA grant 1R41DA025387, from December 2008 to July 2010.

Inside Prescription Drug Abuse – A Web-based Multimedia Resource for Prescription Opiate Treatment

*Larissa Mooney, M.D., Co-Investigator, UCLA Site
Principal Investigator (lmooney@ucla.edu)
Sponsor: Emily Meyers,
Eyes of the World Media Group, Inc.*

This Phase I Small Business Innovation Research (SBIR) project aims to develop a Web-based intervention tool to augment treatment for prescription opioid dependence. Feasibility, perceived value, and changes in knowledge acquisition will be assessed.

Inside Prescription Drug Abuse – A Web-based Multimedia Resource for Prescription Opiate Treatment was funded by a National Institute on Drug Abuse grant (1 R43 DA030879) to UCLA ISAP as a subcontractor and Eyes of the World Media Group as the sponsor, from July 2011 to June 2012.

Mobile Continuing Care Approach for Youth

*Rachel Gonzales, Ph.D., Principal Investigator
(rachelmg@ucla.edu)
Alison Moffitt, B.A., Project Director (amoffit@apu.du)*

The project has two studies. Study 1 was formative research used for the development of a mobile-based text messaging continuing-care Intervention to support youth recovery. Study 2 is a pilot randomized controlled trial of the 12-week mobile-based intervention currently being implemented with youth transitioning out of substance abuse treatment programs.

Mobile Continuing Care Approach for Youth was funded by the National Institute on Drug Abuse, grant 1 K01 DA027754, from July 2010 to July 2011.

Modeling Risk and Protective Factors for Well-being of Maltreated Youth

*Elizabeth Hall, Ph.D., Principal Investigator
(ehall@ucla.edu)
Christine Grella, Ph.D., Co-Investigator (Grella@ucla.edu)
Libo Li, Ph.D., Co-Investigator (lilibo@ucla.edu)*

We conducted a secondary analysis study to identify risk and protective factor trajectories for maltreated youth during the transition from middle childhood to early adolescence and how these trajectories influenced their well-being. The study used data from the National Survey of Child and Adolescent Well-Being (NSCAW), the first national probability survey of children assessed following a child maltreatment report. This study targeted the transition from middle childhood to early adolescence because it is a significant period during which many life patterns are established. By identifying risk and protective factor trajectories for this population and understanding how these trajectories influence outcome, the proposed study enables policymakers to more effectively choose and time intervention services to improve child outcomes. Because a large proportion of Child Welfare System (CWS) cases were linked to parental substance abuse which, in turn, is associated with higher risk of poor child outcomes, we examined this factor in detail. This study made an important contribution to the substance abuse and child welfare research knowledge base because there is a lack of research on trajectories of risk and protective factors during the transition to adolescence that includes the range of risk and protective factors available in the NSCAW dataset.

Modeling Risk and Protective Factors for the Well-being of Maltreated Youth was funded by the National Institute of Child Health & Human Development, grant 1 R03 HD058235, from January 2009 to December 2010. No cost extension to December 2011.

Prenatal Methamphetamine Exposure and School Age Outcome

Barry Lester, M.D., Brown University, Principal Investigator

Richard A. Rawson, Ph.D., Co-Investigator

(rrowson@mednet.ucla.edu)

Dave Bennett, Project Director

The rapidly escalating abuse of methamphetamine (METH) in the United States, places a sense of urgency on understanding the consequences of METH use during pregnancy for the developing child. To our knowledge, the IDEAL (Infant Development Environment and Lifestyle) study is the only prospective longitudinal NIH study of prenatal METH exposure and child outcomes. This is the continuation of a multi-site, longitudinal study that includes four diverse data collection sites where METH use is prevalent (Iowa, Oklahoma, California, and Hawaii) and three data coordinating centers (Brown Center for the Study of Children at Risk, the Data Management Center at UCLA ISAP, and the Center for Substance Abuse Research (CESAR) at the University of Maryland. The responsibilities of the three data coordinating centers included study development and oversight, data management, communication and documentation. The children were enrolled at birth and assessed at multiple age points until 36 months old during Phase I of this study (IDEAL I). The cohort was then followed during Phase II, which spanned the age range from 5 years through 7.5 years old (IDEAL II). We followed 204 METH-exposed and 208 comparison children since birth. We studied a relatively narrow band of executive function domain outcomes supported by the published preclinical and clinical literature and our own preliminary findings. We also studied how these executive function domains affected school-related academic skills. In addition, we examined the effects of prenatal METH exposure on emerging executive function domains including higher order motivation, attention, memory, inhibitory control, visual motor integration, and motor control, and how the effects of prenatal METH exposure are affected by psychosocial risk factors and by postnatal passive drug exposure (e.g., smoke).

Publications from this study include:

- LaGasse LL, Wouldes T, Newman E, Smith LM, Shah R, Derauf C, Huestis MA, Arria AM, DellaGrotta S, Wilcox T, & Lester BM. (2011). Prenatal methamphetamine exposure and neonatal neurobehavioral outcome in the USA and New Zealand. *Neurotoxicology and Teratology*, 33; 166-175. PMID: PMC2974956.
- LaGasse LL, Derauf C, Smith LM, Newman E, Shah R, Neal C, Arria AM, Huestis MA, DellaGrotta S, Hai, L, Dansereau LM, & Lester BM. (2012) Prenatal methamphetamine exposure and childhood behavior problems at ages 3 and 5. *Pediatrics*. Epub ahead of Print March 19, 2012. PMID:22430455.
- Derauf C, MD, LaGasse LL, Smith LM, Newman E, Rizwan Shah, Neal C, Arria AM, Huestis MA, Della Grotta S, Lynne M. Dansereau LM, Lin H, & Lester, BM. (2012). Prenatal methamphetamine exposure and inhibitory control among young school-age children. *The Journal of Pediatrics*. Epub ahead of print March 15, 2012. PMID: 22424953.
- Derauf C, LaGasse LL, Smith LM, Newman E, Shah R, Arria AM, Huestis MA, Haning W, Strauss A, DellaGrotta S, Dansereau L, Lin H, & Lester BM. (2011). Infant temperament and high risk environment relate to behavior problems and language in toddlers. *Journal of Developmental & Behavioral Pediatrics*, 31(1). PMID: PMC3095893.
- Shah R, Copes SD, LaGasse LL, Derauf C, Newman E, Arria AM, Huestis MA, Haning W, Smith LM, Strauss A, DellaGrotta S, Dansereau L, Roberts M, & Lester BM. (in press). Prenatal methamphetamine exposure and short-term maternal and infant medical outcomes. *American Journal of Perinatology*.
- Zabaneh R, Smith LM, LaGasse LL, Derauf C, Newman E, Shah R, Haning W, Arria AM, Huestis MA, Strauss A, DellaGrotta S, Dansereau L, Lin H, and Lester BM. The effects of prenatal methamphetamine exposure on childhood growth patterns from birth to three years of age. *American Journal of Perinatology*. [Epub ahead of print]. PMID:21818727.
- Smith LM, Paz MS, LaGasse LL, Derauf C, Grant P, Shah R, Arria AM, Huestis MA, Haning W, Strauss A, DellaGrotta S, Dansereau L & Lester BM. (in press). Prenatal exposure to methamphetamine and maternal depression: Neurodevelopmental findings from the infant development, environment, and lifestyle (IDEAL) study. *Depression and Anxiety Journal*.
- Liles B, Newman E, LaGasse LL, Derauf C, Shah R, Smith LM, Arria AM, Huestis MA, Haning W, Strauss A, Della Grotta S, Dansereau LM, Neal C, & Lester BM. (in press). Parenting stress among prenatal methamphetamine users: The moderating role of maternal depressive symptoms. *Child Psychiatry and Human Development*.

Prenatal Methamphetamine Exposure and School Age Outcome was funded by the National Institute on Drug Abuse to Women & Infants Hospital with collaboration by UCLA ISAP, from September 2007 through May 2012.

Reducing Unhealthy Alcohol Use in Older Hispanic Laborers

*Alison Moore, M.D., M.P.H. Principal Investigator
(aamoore@mednet.ucla.edu)*

*Mitchell Karno, Ph.D. (Karno@ucla.edu) & Lara Ray,
Ph.D. (lararay@psych.ucla.edu), Co-Investigators
Karina Ramirez, Project Director*

This study combines two evidence-based behavioral therapies, Motivational Enhancement Therapy (MET) and Strengths Based Case Management (SBCM) to improve treatment engagement and retention and to reduce unhealthy drinking in primarily Spanish-speaking, socially disadvantaged Hispanic men. Both of these approaches are non-confrontational and aim to engage the client in the change process and to improve self-efficacy; MET addresses internal factors and SBCM addresses external factors affecting behavior change. Integrating these behavioral interventions and delivering them via community health promoters (promotoras) in the community rather than in health care settings should increase the likelihood of success in improving treatment engagement and retention and reducing alcohol use in this population.

Reducing Unhealthy Alcohol Use in Older Hispanic Laborers was funded by the National Institutes of Health/National Institute on Alcohol Abuse and Alcoholism, grant 1 R21 AA019738, from May 2011 to April 2013.

Women, Methamphetamine, and Sex

*Alison Hamilton, Ph.D., M.P.H. Principal Investigator
(alisonh@ucla.edu)*

This 5-year project focused on the relationship between methamphetamine (MA) and sex among women MA users. Thirty women in residential treatment participated in in-depth interviews. They were asked about their history of using MA and other substances, their life experiences (including any trauma or abuse they may have experienced), and their perspectives on how MA has affected their lives, specifically their intimate relationships and sexual behaviors. In the follow-up phase, these participants were interviewed about their experiences since the first interview. Recovery, relapse, intimate

relationships, and several other topics were explored. As a career development award, the project also involved training for the principal investigator (PI) in public health and community health sciences. This study adds to the body of literature on the impact of substance abuse on life experiences. Considering that women who abuse substances such as MA typically have multiple factors placing them at risk for poor sexual decision-making (e.g., histories of violence and abuse), a more in-depth understanding of how women MA users conceptualize their sexual behaviors and experiences could assist in developing interventions for them. The PI's co-mentors on the project were Drs. Richard Rawson (UCLA ISAP), Yih-Ing Hser (UCLA ISAP), and Vivian Brown (PROTOTYPES).

Related Publications:

Hamilton, A., Goeders, N. (2010). Violence perpetrated by women who use methamphetamine. *Journal of Substance Use, 15* (5), 313–329.

Hamilton, A. (In press). The vital conjuncture of methamphetamine-involved pregnancy: Objective risks and subjective realities. In *Responsible Reproduction? Social and Biomedical Constructions of Reproductive Risk*, Lauren Fordyce & Aminata Maraesa, Editors. Vanderbilt University Press.

Women, Methamphetamine and Sex was funded by the National Institute on Drug Abuse, grant 1 K01 DA017647, from April 2006 through March 2011.

Substance Use Disorders Policy

Integration of Substance Use Disorder Treatment with Primary Care in Preparation for Health Care Reform

*Darren Urada, Ph.D., Principal Investigator
(durada@ucla.edu)*

Cheryl Teruya, Ph.D., Co-Investigator

Research suggests that providing substance use disorder (SUD) services in health care settings is feasible, can reach many more individuals than reliance on community-based specialty SUD treatment alone, promises better outcomes for patients, and can result in reduced overall health care utilization costs. Furthermore, as a result of the Affordable Care Act, mental health and SUD treatment are expected to become more closely integrated with each other and with primary care. However, little data on the current state of integration currently exists. We conducted a small study targeting federally qualified health centers (FQHCs) using online surveys and qualitative interviews to assess SUD integration with primary care, mental health, and HIV/AIDS services in California primary care settings. **Results:** Half of the organizations reported collaboration between SUD and primary care, but the other half reported only minimal or basic levels of integration. In general, SUD services are not as well integrated with primary care as mental health services are, are rated as less effective than mental health services, and are separated from primary care services physically and temporally. The difference in effectiveness appears to be due to provider training, not in attitudes toward SUD patients. Participants indicated interest in obtaining training in SUD treatment to address this. Policy recommendations were included in the final report.

Integration of Substance Use Disorder Treatment with Primary Care in Preparation for Health Care Reform was funded by California Program on Access to Care, contract KKN06A, from October 2011 to October 2012.

Training and Dissemination

2010–2011 NIDA INVEST Research Fellowship for Saeed Momtazi, M.D.

*Richard A. Rawson, Ph.D., Principal Investigator
(rarrowson@mednet.ucla.edu)*

Dr. Saeed Momtazi, of Tehran, Iran, was a NIDA International Program INVEST Fellow, selected to participate in a drug abuse research fellowship at ISAP for 1 year. Dr. Momtazi is an Assistant Professor of Psychiatry at Zanjan University of Medical Sciences and Head of its Psychiatry Department. While at ISAP, Dr. Momtazi's research objective was to examine and compare the knowledge, attitudes and behaviors concerning drug abuse among Iranians living in Iran, Iranian-Americans living in the United States, and U.S. non-Iranian Americans. Furthermore, Dr. Momtazi was exposed to graduate courses, seminars, and workshops on campus. He was involved in myriad addiction psychiatry activities, such as Dr. Timothy Fong and Dr. Larissa Mooney's Addiction Medicine Clinic at the UCLA Ronald Reagan Hospital and Cedars-Sinai Hospital's Addiction Professionals Roundtable discussions. Additionally, Dr. Momtazi presented a poster entitled, "Behavioral Surveillance Study Among a Sample of Injection Drug Users in Iran" at the American Psychiatric Association 2011 conference in San Francisco, CA. Another poster entitled "Methamphetamine Induced Psychotic Disorders in Iran, Psychopathology and Demographic Features" was presented by Dr. Momtazi at the American Academy of Addiction Psychiatry conference in Scottsdale, AZ. He also participated in the California Society of Addiction Medicine and UCLA Co-Occurring Disorders conferences in October.

2010–2011 NIDA INVEST Research Fellowship for Saeed Momtazi, M.D., was funded by the National Institute on Drug Abuse, grant 20111206, from September 2011 to August 2012.

**2011-2012 NIDA INVEST
Research Fellowship for Dr. Xuyi Wang**

*Walter Ling, M.D., Principal Investigator
(lwalter@ucla.edu)*

This grant is provided by the National Institute on Drug Abuse's Clinical Trials Network (CTN) to provide training in drug abuse and to foster collaboration between the grantee with established investigators at the sponsoring site. Dr. Wang's goals are to attain expertise in clinical trials research and learn sophisticated research methodologies. His research plan has two components. First, throughout the fellowship period at the UCLA Integrated Substance Abuse Programs (ISAP), he will participate with ISAP Director Dr. Ling and other physicians and clinical personnel in the conduct of clinical trials of addiction treatments, and will attend pertinent seminars, presentations, and formal courses. Second, to accomplish the objective of applying acquired knowledge to research methodologies, he will conduct a project of secondary analysis of existing CTN data pertinent to future research to be conducted in China when he returns after the fellowship. Dr. Wang proposes to compare the effectiveness of contingency management added to pharmacotherapy for methamphetamine dependence, and will examine drug use and HIV-related risk behaviors before and after medication and contingency management treatment among methamphetamine-dependent study participants. As part of this training, he will collaborate on the preparation of a manuscript of study findings to be submitted for publication.

2011-2012 NIDA INVEST Research Fellowship for Dr. Xuyi Wang was funded by the National Institute on Drug Abuse, grant 20101668, from June 2011 to May 2012.

**California Addiction Training and
Education Series (CATES)**

*Thomas E. Freese, Ph.D., Principal Investigator
(tfreese@mednet.ucla.edu)
Beth Rutkowski, M.P.H., Project Director*

CATES is a series of one-day trainings (launched in March 2004) designed to provide in-depth information to individuals working with substance-using populations. The information provided is based on sound science but presented in such a way that it is directly useful when working with these clients. CATES trainings cover one or two topics per year. Each topic is presented in at least three locations across California. The target audience for CATES is substance use disorders and mental health treatment providers, administrators, and other professionals (e.g., researchers, psychologists, educators, law enforcement personnel, nurses, and physicians) interested in the latest information on the impact of substance use disorders and effective interventions and treatments. An expanded version of CATES, which now includes 3 to 6 months of follow-up, coaching conference calls and Webinars, was initiated in the spring of 2007. The purpose of this follow-up is to provide CATES training participants with opportunities for ongoing learning, technical assistance, and skill development. A total of 31 CATES training sessions have been conducted since the series' inception, and have involved several thousand California-based treatment practitioners. Topics covered to date in the CATES series include methamphetamine treatment; motivational interviewing and contingency management; improving client engagement and retention in treatment; PTSD and substance abuse, with a focus on returning military members, veterans, and their families; and addiction treatment under health reform. (Additional information is available at www.psattc.org.)

CATES was funded in part by the State of California, Department of Alcohol and Drug Programs, contract 10-00130, from October 2010 through September 2013.

Evaluation, Training, and Technical Assistance for Substance Use Disorder Services Integration

*Darren Urada, Ph.D., Principal Investigator
(durada@ucla.edu)*
Richard Rawson, Ph.D., Co-Investigator
Valerie Antonini, MPH, Project Director

The purpose of this project is to provide evaluation, training, and technical assistance (ETTA) for substance use service integration activities within the health care system of California. Over the next 3 years, ISAP will provide the following:

1. Examine how ongoing policy changes are affecting who receives substance use disorders (SUDs) treatment and how access, services, costs, and quality of care are being affected. Make recommendations to improve policies, practices, and data quality.
2. Refine program performance and patient outcome measures.
3. Collect and disseminate cutting-edge information on the integration of SUD services with mental health and primary care services.
4. Recommend strategic planning principles to guide the development of an integrated drug treatment delivery system in California in the context of health care reform.
5. Coordinate and facilitate an interactive forum (Learning Collaborative) with county administrators and other key stakeholders to discuss SUD integration.
6. Conduct Case Study/Pilot Evaluations.
7. Provide training at the county level on strategies to prepare for health care reform.
8. Provide technical assistance at the county level to facilitate integration following the implementation of major health care reforms in 2014.

For more information, please visit <http://www.uclaisap.org/Affordable-Care-Act/index.html>.

Evaluation, Training, and Technical Assistance for Substance Use Disorder Services Integration was funded by the California Department of Alcohol and Drug Programs, contract 12-00117, from July 2012 to June 2015.

HIV/AIDS: Translational Approaches and Health Disparities

*Gail E. Wyatt, Ph.D., Principal Investigator
(gwyatt@mednet.ucla.edu)*
*Alison Hamilton, Ph.D., M.P.H. (alisonh@ucla.edu),
Norweeta Milburn, Ph.D. (nmilburn@mednet.ucla.edu),
John Williams, M.D. (keoniwmd@aol.com), Hector Myers,
Ph.D. (myers@psych.ucla.edu), Steve Shoptaw, Ph.D.
(sshoptaw@mednet.ucla.edu), Co-Investigators*

This is a 2-year research mentorship program for racial and ethnic minority investigators studying HIV/AIDS, mental health, and substance abuse and their associated co-morbid disparities.

HIV/AIDS: Translational Approaches and Health Disparities was funded by the National Institute of Mental Health, contract MH080664, from May 2009 to April 2012.

**Los Angeles County,
Department of Mental Health
Co-Occurring Disorder Training Program**

*Thomas Freese, Ph.D., Principal Investigator
(tfreese@mednet.ucla.edu)*
*Sherry Larkins, Ph.D., Co-Investigator & Project Director
(larkins@ucla.edu)*

This 3-year training and technical assistance (TA) project focuses on skill and knowledge development of the Los Angeles County Department of Mental Health workforce to ensure providers are delivering more integrated and co-occurring capable care. To infuse co-occurring disorders (COD) knowledge and skills into the LA County mental health system, we coupled empirically based didactic trainings with ongoing skills-based coaching and mentoring of provider staff at clinic sites. Several targeted DMH providers are the focus of training and TA services, including older adult providers, adolescent providers, those working on integrated mental health primary care, substance abuse service teams, and those providing services to criminal justice populations. Our training and TA formats range from large (600+ person) conferences, small skill-building trainings, webinars, consulting, and

clinical supervision and coaching, with the mission of helping professional staff better understand addiction, its co-occurrence with mental illness, and evidence-based interventions to best treat those suffering from dual-disorders. For more information, please visit <http://www.uclaisap.org/dmhcod/index.html>.

Co-Occurring Disorder Training Program was funded by the Los Angeles County Department of Mental Health, contracts MH010054 and MH010089, from July 2010 to June 2013.

Orange County Health Care Agency – Screening, Brief Intervention, and Referral to Treatment (SBIRT) Training Program

Thomas Freese, Ph.D., Principal Investigator
(tfreese@mednet.ucla.edu)

Sherry Larkins, Ph.D. Co-Investigator & Project Director
(larkins@ucla.edu)

This 1-year training and technical assistance project focuses on skill and knowledge development of the Orange County Health Care Agency (OCHCA) workforce to ensure providers are delivering more integrated and co-occurring capable care. Under the statewide INNOVATIONS programs, counties have Mental Health Services Act funds to experiment with the integration of mental health, addiction, and primary care services. OCHCA has contracted with UCLA ISAP to provide overview trainings on screening, brief intervention, and referral to treatment (SBIRT), as well as on-site targeted skill-building and coaching for staff who will be responsible for implementing screening and brief interventions at community mental health and primary care clinics across the county.

Screening, Brief Intervention and Referral to Treatment was funded by Orange County Health Care Agency, from June 2012 to May 2013.

Substance Abuse Research Consortium State Contract

Thomas E. Freese, Ph.D., Principal Investigator
(tfreese@mednet.ucla.edu)

Beth Rutkowski, M.P.H., Project Director

The Substance Abuse Research Consortium (SARC) meetings offer an opportunity for professionals from a variety of disciplines to exchange current information on California substance use disorders trends, promising prevention and treatment strategies, criminal justice and social service partnerships, and other substance use disorders-related topics. The target audiences for these meetings include substance use disorders researchers, treatment providers, administrators, policymakers, and other individuals interested in substance use disorders research- and policy-related issues. Meetings were conducted on May 24, 2010 (Sacramento, CA), and September 20, 2010 (Burbank, CA), on the implementation of evidence-based practices in treatment of criminal justice-involved clients, and on September 14, 2011 (Burbank, CA), and September 16, 2011 (Sacramento, CA), on the evidence for integrated care for substance use disorders, mental health, and primary care. Additionally, the SARC contract has funded seven special theme issues of the *Journal of Psychoactive Drugs*. Each of these issues contained articles written by SARC meeting presenters based on the information that they presented. An eighth special issue (under a new funding mechanism), which is based on the 2011 SARC meeting series, was published in fall 2012. Additional products completed under the SARC contract include white papers on a variety of topics, including *Methamphetamine in the Workplace*, *Prescription Drug Abuse*, *Screening, Brief Intervention, and Referral to Treatment (SBIRT)*, and *Transitional Housing Approaches and Models Supporting Recovery from Substance Use Disorders*, and a clinical toolkit on methamphetamine for clinicians. Additional information is available at www.psattc.org.

SARC State Contract was funded by the State of California, Department of Alcohol and Drug Programs, Contract 10-00130 (October 2010 through September 2013).

The Pacific Southwest Addiction Technology Transfer Center

*Thomas E. Freese, Ph.D., Principal Investigator
(tfreese@mednet.ucla.edu)*

*Richard A. Rawson, Ph.D., Co-Investigator
(rrawson@mednet.ucla.edu)*

*Thomas E. Freese, Ph.D., & Michael S. Shafer, Ph.D.,
Project Directors*

Beth Rutkowski, M.P.H., Associate Director of Training

The Pacific Southwest Addiction Technology Transfer Center (Pacific Southwest ATTC) provides training, acquires and shares information, and promotes incorporation of empirically based substance use disorders practices into treatment. In order to help community service providers to efficiently produce optimum outcomes, the main work of the Pacific Southwest ATTC is to disseminate knowledge about state-of-the-art treatment practices and their delivery. Drawing on research conducted by UCLA ISAP, a major focus of Pacific Southwest ATTC work has been to educate providers about the impact of methamphetamine (MA) use and effective treatment strategies for MA-dependent individuals. Additional key topics include: screening, brief intervention, and referral to treatment (SBIRT); co-occurring mental and substance abuse disorders; NIATx process improvement strategies to increase access to and engagement and retention in treatment; the integration of substance use, mental health, and primary care services; and medication-assisted treatments for opioid and alcohol addiction (specifically methadone, buprenorphine, and naltrexone). The Pacific Southwest ATTC works to promote changes in attitudes across all involved settings in the Pacific Southwest (including academic and government agencies, as well as among clinicians involved in treating those with substance use disorders) regarding the status of the field, the need to increase cultural competence among substance use disorders treatment professionals, the need for greater interaction among stakeholders, and the need for more training for substance use disorders treatment professionals. The Pacific Southwest ATTC, led by ISAP in partnership with faculty from Arizona State University (ASU), provides an exemplary resource and an extraordinary array of expertise and experience in training, evaluation, and distance learning techniques for substance use disorders

professionals. The combination of the ISAP and ASU groups, along with key stakeholders, consultants, and community organization partners in Arizona and California, creates an extraordinary resource to meet the extensive and rapidly evolving training and technology transfer needs of the field. (Additional information is available at: www.psattc.org.)

The Pacific Southwest Addiction Technology Transfer Center was funded by the Substance Abuse and Mental Health Services Administration / Center for Substance Abuse Treatment, grant 5 UD1 TI013594, from March 2002 through September 2012.

UCLA Pre- and Postdoctoral Training Program

*Christine E. Grella Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)*

Kira Jeter, MA, Training Coordinator

The UCLA Integrated Substance Abuse Programs (ISAP) offers training to predoctoral and postdoctoral Ph.D. and M.D. fellows. The 2-year research training program provides a core curriculum in current addiction health services research and research methodology, and offers hands-on participation in ongoing research studies with training faculty. In addition, trainees participate in career development activities and continuous training in the responsible conduct of research. Specific training areas are:

- clinical trials research (pharmacotherapy and behavioral)
- treatment effectiveness and outcomes
- organizational development and service system integration and evaluation
- longitudinal research methodologies and statistical modeling
- qualitative research methods
- drug use and HIV
- interventions for substance-abusing offenders, both in prison and the community
- interventions for women, adolescents, and individuals with co-occurring disorders

- drug use and social policy
- research-to-practice and implementation research

Trainees are exposed to a broad variety of drug abuse research studies and settings, and have the opportunity to select an area of focus for research that is supported by faculty mentoring, as well as access to resources at UCLA and the surrounding community. The Training Program funds fellowships for two predoctoral and three postdoctoral trainees each year.

UCLA Drug Abuse Research Training Center was funded by the National Institute on Drug Abuse, grant 2 T32 DA07272, from September 1991 through June 2012.

Women's Substance Use Disorders Issues

A Long-term Follow-up Study of Drug-Dependent Mothers and their Children

Yih-Ing Hser, Ph.D., Principal Investigator

(yhser@ucla.edu)

Nena Messina, Ph.D., Co-Investigator

Elizabeth Evans, M.A., Project Director

Risky health behavior causes serious health problems for drug-dependent mothers and their children. In recent years, an increased number of women-only programs have offered special services to address the unique problems and service needs of mothers, including child care and parenting services. However, few studies have examined short-term and long-term outcomes of mothers and children served in women-only programs. We conducted a long-term follow-up study of 4,500 mothers treated for risky health behaviors via their administrative records, and by interviewing a subsample of mothers ($n = 1,000$) to provide complementary data on their status. Additionally, we collected assessment data from the mothers interviewed on their target children (mostly aged 8 to 10). The specific aims of the study were: (1) to investigate mothers' long-term outcomes measured by administrative records (e.g., treatment, mental health, arrest) in relation to their index treatment in women-only versus mixed-gender programs; and (2) to locate and interview a subset of mothers to determine, in relation to mothers' index treatment in women-only versus mixed-gender programs, (a) mothers' status (social support, parenting behaviors, health behaviors, mental health) and (b) children's status (custody, school achievement, behavioral problems). The study provided empirical data with treatment and policy implications for improving services and outcomes for mothers and their children.

For more information, please see the following publications:

Hser, Y.I., Hunt, S., Chang, Y., Evans, E., & Messina, N. (in press). Hispanic parenting women in women-only versus mixed-gender drug treatment: A 10-year prospective study. *Addictive Behaviors*.

Hser, Y., Kagihara, J., Huang, Y., Evans, E., Messina, N. (2012). Mortality among substance-using mothers in California: A 10-year prospective study. *Addiction*, 107(1): 215-222.

Hser, Y.-I., Evans, E., Huang, D., & Messina, N. (2011). Long-term outcomes among drug dependent mothers treated in women-

only versus mixed-gender programs. *Journal of Substance Abuse Treatment*, 41(2):115-123.

A Long-term Follow-up Study of Drug-Dependent Mothers and their Children was funded by the National Institute on Drug Abuse, grant 1 R01 DA021183, from June 2009 to May 2011.

Enhancing Substance Abuse Treatment Services for Women Offenders

Nena Messina, Ph.D., Principal Investigator
(nmessina@ucla.edu)

Maria Zarza, Ph.D., Project Director
(September 2005 to September 2007)

Stacy Calhoun, M.A., Project Director
(September 2007 – 2010)

This 3-year study examined Mental Health Systems, Inc.'s (MHS), readiness and capacity for practice improvement as it incorporated women-focused treatment into four MHS program sites serving female drug-court participants. This study also included an experimental component to determine the relative effectiveness of a women-focused (WF) treatment program based on relational theory, compared to the standard mixed-gender (MG) outpatient treatment program delivered to women offenders deferred from incarceration through drug court to promote positive behaviors (e.g., reducing criminal offending and substance abuse) and improve psychological functioning. The WF curricula had been fully developed by Stephanie Covington (i.e., *Helping Women Recover and Beyond Trauma*); however, this was the first empirical test of the curricula in a community treatment setting. Specifically, 150 women participating in four MHS drug court programs in San Diego, California, were randomly assigned to the WF or MG treatment program groups. The proposed study had the following specific aims:

1. To identify and address barriers to coordinating and integrating new and appropriate WF services, including HIV prevention, for substance-dependent women offenders;

2. To coordinate and integrate a theoretically based women-focused protocol into the existing MHS program curriculum;
3. To develop effective fidelity measures to assess staff performance, adherence, and retention to the newly integrated curriculum;
4. To pilot test the efficacy of the theoretically based, multi-faceted, WF curriculum to promote positive behaviors among women offenders, compared to the impact of the standard MG program;
5. To qualitatively assess women's perceptions of their treatment experience, comparing those of women in the newly integrated WF program with those of women in the standard MG program.

Findings

Findings from the staff focus groups revealed that the facilitators were very supportive of implementing the WF curriculum in their drug court treatment program and showed a strong willingness to be trained in the new curriculum. However, they were concerned that they were not trained enough to deal with traumatic events that might come up in group. In particular, they were worried about "opening a can of worms" and being unable to resolve the situation before a session is finished and thereby placing the client at risk for using again. Findings indicate the need to provide the counselors with an on-site experienced clinician to help them deal personally and professionally with their daily work.

Results from the experimental component of the study showed that the WF participants had significantly better in-treatment performance, more positive perceptions related to their treatment experience, and positive trends indicating reductions in PTSD symptomatology. Both groups improved in their self-reported psychological well-being and reported reductions in drug use (this comparison approached significance, $p < .06$), and arrest (a diagnosis of PTSD was the primary predictor of reductions in re-arrest, $p < .04$). Findings show the beneficial effects of treatment components oriented toward women's needs. Significant questions remain, particularly

around PTSD and whether these symptoms should be targeted to improve substance use outcomes for women offenders.

Enhancing Substance Abuse Treatment Services for Women Offenders was funded by Mental Health Systems, Inc., grant 720 (R01 DA022149), from September 2005 to July 2010.

Evaluation of HealthRight 360 Pregnant and Parenting Women's Treatment Program

Christine E. Grella, Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)
Luz Rodriguez, Project Director

The Families Living our Recovery (FLOR) project will provide comprehensive services to women offenders with a history of substance abuse problems at the HealthRight 360 residential treatment program in El Monte, CA. FLOR participants are recruited into the project at the time of their parole from prison. The program goals are to improve participants' family functioning, employment status, and psychosocial functioning; to provide treatment for substance abuse, mental health, and trauma-related problems; and to assist participants as they transition to the community, including family reunification. The FLOR project utilizes evidence-based parenting and family strengthening interventions within the context of intensive case management services. Participants also receive vocational training and training in life management skills. Children of FLOR participants may reside in the residential treatment program and are provided with prevention, early intervention, and medical services through community partnerships. The program also aims to promote the development of a comprehensive, integrated service delivery system through community partnerships that utilize family-centered treatment planning. UCLA ISAP will conduct a process and outcome evaluation study of the FLOR project. The evaluation study will examine whether the project recruits the intended target population, the degree to which the program model is successfully implemented, and participant outcomes at follow-up,

including substance use, psychosocial functioning, family status, and employment and housing status.

Evaluation of Pregnant and Parenting Women's (PPW) Program was funded by the Haight-Ashbury Free Clinic (now HealthRight 360), contract 20114625, from October 2011 to September 2014.

Evaluation of Horizon's Integrated AODA Treatment/HIV Services for Justice-Involved Women

Nena Messina, Ph.D., Principal Investigator
(nmessina@ucla.edu)
Kira Jeter, M.P.H., Project Director

The purpose of this SAMHSA-funded project was to expand Community Advocates - Horizons Campus' program to increase access to integrated outpatient AODA treatment and HIV services for a minimum of 600 justice-involved women, who are less likely to enter treatment through formal systems. Objectives were to: (1) increase the number of women who participate in integrated outpatient AODA/HIV services from 25 to 125 women per year; (2) enhance Community Advocates-Horizons Campus' program with research-based AODA/HIV curricula that engaged hard-to-reach women, their children, and their partners; and (3) increase the number of women and partners who receive rapid HIV testing from 90 to 200 per year. ISAP conducted the evaluation, which (1) included process and outcome components to monitor the implementation of the planned intervention and (2) measure observed changes in participants from before to after their participation in the project in the following domains of functioning: (a) alcohol and drug use; (b) parenting behaviors and family functioning; (c) quality of life and social functioning; (d) criminal behavior and legal status; (e) mental health and physical health status; (f) HIV/AIDS risk reduction behaviors; and (g) treatment and services received. The program worked with parole and probation departments in the Milwaukee area to recruit participants. Horizons' has been successful in completing follow-up interviews. Once engaged, participants continued to stay well connected to the staff and/or services offered by the program.

Evaluation of Community Advocates - Horizons Campus Integrated AODA Treatment/HIV Services for Justice-Involved Women was funded by the Substance Abuse and Mental Health Services Administration, grant T118592 to Community Advocates-Horizons Campus, from October 2007 to September 2012.

Evaluation of the Liberating our Families from Drugs and Incarceration Program

*Christine E. Grella, Principal Investigator
(cgrella@mednet.ucla.edu)
Luz Rodriguez, Project Director*

ISAP conducted the evaluation of the SAMHSA-funded project "Liberating our Families from Drugs and Incarceration (LOFFDI)," which was part of the Pregnant and Parenting Women's Treatment Initiative at the Center for Substance Abuse Treatment. The LOFFDI program was provided at the Walden House program in El Monte, CA, and the target population was women parolees who had a history of substance use problems and who were pregnant or had young children. The program's objectives were to improve the mental and physical health status, employment status, and parenting skills of participants so that they could successfully reintegrate into the community following their release from prison. Intensive case management services were provided within the context of residential substance abuse treatment, which included children's services, family counseling, parenting skills training, vocational services, mental health services, trauma-related services, and referral for medical services for the women and their children. The evaluation study showed that approximately 60% of participants ($N = 110$) completed the LOFFDI treatment, compared with an average of 39% for participants in other aftercare programs for female offenders in California. Moreover, LOFFDI participants demonstrated significant improvements in their alcohol and drug use, psychological status, family functioning, employment, and quality of life at the 6-month post-discharge follow-up. Participants had a high level of satisfaction with the services received, and staff improved their competency in delivering parenting and other services over the course of project implementation. Overall, the evaluation demonstrated

that LOFFDI participants improved in targeted domains that address the multiple and complex problems faced by female offenders and their families as they re-integrate into the community following parole.

Evaluation of the Liberating our Families from Drugs and Incarceration Program was funded by Walden House, Inc., contract 20064370, from October 2006 to September 2010.

Evaluation of Trauma Informed Substance Abuse Treatment (TI-SAT)

*Christine E. Grella, Ph.D., Principal Investigator
(cgrella@mednet.ucla.edu)
Nena Messina, Ph.D., Co-Investigator
Luz Rodriguez, B.A., Project Director*

The Trauma-Informed Substance Abuse Treatment (TI-SAT) program was established at the Leo Chesney Community Correctional Facility in 2008 to provide gender-responsive and trauma-informed substance abuse treatment for women offenders. The treatment approach recognizes that childhood and adult trauma exposure is pervasive among women offenders and intricately related with their substance abuse problems. ISAP conducted an evaluation of the TI-SAT to (1) determine whether the trauma-informed treatment components were implemented as planned; (2) determine whether obstacles were encountered in the implementation process, and if so, to determine the strategies used to address these obstacles; and (3) determine the characteristics of participants, their treatment retention and aftercare participation, and their outcomes on parole. A total of 106 participants were recruited to participate in the outcome study; interviews were conducted at study intake and at 6-month follow-up. Outcome analyses examined the effects of program participation on status and functioning of participants, including their relapse to substance use, criminal behavior involvement, employment, parenting and family relationships, and overall mental health and psychosocial functioning. In addition, surveys with program staff and observational site visits were conducted to determine whether the gender-responsive and trauma-informed program components were successfully implemented. Findings demonstrated that the program components were successfully implemented and that participants in the TI-

SAT had higher levels of treatment retention and aftercare participation than women in other prison-based treatment programs.

Evaluation of Trauma Informed Substance Abuse Treatment (TI-SAT) was funded by the State of California Department of Corrections and Rehabilitation, contract C08.106, from October 2008 to March 2011.

Gender-Responsive Treatment for Women Offenders

*Michael Prendergast, Ph.D., Principal Investigator
(mp@ucla.edu)*

*Nena Messina, Ph.D., & Elizabeth Hall, Ph.D.,
Co-Investigators*

This 5-year study was designed to determine whether drug abuse treatment programs designed specifically for women offenders result in better outcomes than do mixed-gender programs. Consistent findings regarding the greater severity of women's drug abuse, past trauma, and psychological disorders have led many researchers to advocate the use of gender-responsive treatment for women as a more appropriate and effective way to facilitate their recovery. As policymakers and treatment providers consider expanding treatment options for women offenders, it is critically important to determine whether women-only (WO) treatment programs do produce better outcomes than standard mixed-gender (MG) programs. This study involved the cooperation of community-based drug abuse treatment agencies providing Drug Court, Substance Abuse Crime and Prevention Act (SACPA, or Prop. 36), perinatal, and other outpatient treatment within Los Angeles County. The study used a quasi-experimental design with study intake into two treatment conditions (MG vs. WO) and had the following specific aims: (1) To evaluate the impact of WO programs on drug use, criminal activity, and social functioning (e.g., employment, education, parenting behavior) for women offenders, compared to the impact of MG programs, and (2) To qualitatively assess women's perceptions of their treatment experiences in the WO and MG treatment programs. Using a propensity-score approach to balance the two groups on baseline characteristics, analysis indicated that at 12-months following treatment

entrance, women who participated in WO programs were significantly less likely to use drugs and to commit crimes than were women in MG programs, but the groups did not differ significantly on arrest and employment.

For more information, please see:

Prendergast, M., Messina, N., Hall, E., & Warda, U. (2011). The relative effectiveness of women-only versus mixed-gender substance abuse treatment. *Journal of Substance Abuse Treatment, 40*(4), 336-348. (PMCID: PMC3081899)

Gender-Responsive Treatment for Women Offenders was funded by the National Institute on Drug Abuse, grant 1 R01 DA016277, from September 2004 through August 2010.

Prenatal Methamphetamine Exposure and School Age Outcome

*Barry Lester, M.D., Brown University, Principal Investigator
Richard A. Rawson, Ph.D., Co-Investigator
(rarrowson@mednet.ucla.edu)
Dave Bennett, Project Director*

The rapidly escalating abuse of methamphetamine (METH) in the United States, places a sense of urgency on understanding the consequences of METH use during pregnancy for the developing child. To our knowledge, the IDEAL (Infant Development Environment and Lifestyle) study is the only prospective longitudinal NIH study of prenatal METH exposure and child outcome. This is the continuation of a multi-site, longitudinal study that includes four diverse data collection sites where METH use is prevalent (Iowa, Oklahoma, California, and Hawaii) and three data coordinating centers (Brown Center for the Study of Children at Risk, the Data Management Center at UCLA ISAP, and the Center for Substance Abuse Research (CESAR) at the University of Maryland. The responsibilities of the three data coordinating centers included study development and oversight, data management, communication and documentation. The children were enrolled at birth and assessed at multiple age points until 36 months old during Phase I of this study (IDEAL I). The cohort was then followed during Phase II,

which spanned the age range from 5 years through 7.5 years old (IDEAL II). We followed 204 METH-exposed and 208 comparison children since birth. We studied a relatively narrow band of executive function domain outcomes supported by the published preclinical and clinical literature and our own preliminary findings. We also studied how these executive function domains affected school-related academic skills. In addition, we examined the effects of prenatal METH exposure on emerging executive function domains including higher order motivation, attention, memory, inhibitory control, visual motor integration, and motor control, and how the effects of prenatal METH exposure are affected by psychosocial risk factors and by postnatal passive drug exposure (e.g., smoke).

Publications from this study include:

- LaGasse LL, Wouldes T, Newman E, Smith LM, Shah R, Derauf C, Huestis MA, Arria AM, DellaGrotta S, Wilcox T, & Lester BM. (2011). Prenatal methamphetamine exposure and neonatal neurobehavioral outcome in the USA and New Zealand. *Neurotoxicology and Teratology*, 33; 166-175. PMID: PMC2974956.
- LaGasse LL, Derauf C, Smith LM, Newman E, Shah R, Neal C, Arria AM, Huestis MA, DellaGrotta S, Hai, L, Dansereau LM, & Lester BM. (2012) Prenatal methamphetamine exposure and childhood behavior problems at ages 3 and 5. *Pediatrics*. Epub ahead of Print March 19, 2012. PMID:22430455.
- Derauf C, MD, LaGasse LL, Smith LM, Newman E, Rizwan Shah, Neal C, Arria AM, Huestis MA, Della Grotta S, Lynne M. Dansereau LM, Lin H, & Lester, BM. (2012). Prenatal methamphetamine exposure and inhibitory control among young school-age children. *The Journal of Pediatrics*. Epub ahead of print March 15, 2012. PMID: 22424953.
- Derauf C, LaGasse LL, Smith LM, Newman E, Shah R, Arria AM, Huestis MA, Haning W, Strauss A, DellaGrotta S, Dansereau L, Lin H, & Lester BM. (2011). Infant temperament and high risk environment relate to behavior problems and language in toddlers. *Journal of Developmental & Behavioral Pediatrics*, 31(1). PMID: PMC3095893.
- Shah R, Copes SD, LaGasse LL, Derauf C, Newman E, Arria AM, Huestis MA, Haning W, Smith LM, Strauss A, DellaGrotta S, Dansereau L, Roberts M, & Lester BM. (in press). Prenatal methamphetamine exposure and short-term maternal and infant medical outcomes. *American Journal of Perinatology*.
- Zabaneh R, Smith LM, LaGasse LL, Derauf C, Newman E, Shah R, Haning W, Arria AM, Huestis MA, Strauss A, DellaGrotta S, Dansereau L, Lin H, and Lester BM. The effects of prenatal methamphetamine exposure on childhood growth patterns from birth to three years of age. *American Journal of Perinatology*. [Epub ahead of print]. PMID:21818727.
- Smith LM, Paz MS, LaGasse LL, Derauf C, Grant P, Shah R, Arria AM, Huestis MA, Haning W, Strauss A, DellaGrotta S, Dansereau L & Lester BM. (in press). Prenatal

exposure to methamphetamine and maternal depression: Neurodevelopmental findings from the infant development, environment, and lifestyle (IDEAL) study. *Depression and Anxiety Journal*.

- Liles B, Newman E, LaGasse LL, Derauf C, Shah R, Smith LM, Arria AM, Huestis MA, Haning W, Strauss A, Della Grotta S, Dansereau LM, Neal C, & Lester BM. (in press). Parenting stress among prenatal methamphetamine users: The moderating role of maternal depressive symptoms." *Child Psychiatry and Human Development*.

Prenatal Methamphetamine Exposure and School Age

Outcome was funded by the National Institute on Drug Abuse to Women & Infants Hospital with collaboration by UCLA ISAP, from September 2007 through May 2012.

TOWAR: A Comprehensive Training on Women's Addiction and Recovery

Nena Messina, Ph.D., Principal Investigator
(nmessina@ucla.edu)

Stacy Calhoun, M.A., Project Manager

The UCLA Integrated Substance Abuse Programs in collaboration with Social Solutions International, Inc., received funding from the National Institute on Drug Abuse to develop TOWAR: a comprehensive Training on Women's Addiction and Recovery specifically for use in drug courts. The specific aims of this Phase I Small Business Technology Transfer (STTR) project were as follows:

1. To develop a woman-focused training program (i.e., TOWAR) to educate drug court personnel (i.e., the judge, district attorney, public defender, bailiff, sheriff, etc.) on the specific issues relevant to the recovery of drug-dependent women offenders (e.g., HIV-risk behavior, mental health, physical health, prostitution, child-custody, trauma, domestic violence, etc.);
2. To develop a specific drug court model of care for women offenders that includes an appropriate treatment protocol for drug-dependent women offenders that can be easily integrated into any treatment facility, a woman-focused schedule of rewards and sanctions (i.e., positive reinforcement for short-term successes and/or consequences for failure to meet program requirements), and a systematic link between the court and social service partners in the county both during

treatment and for the purpose of establishing aftercare;

3. To qualitatively assess the feasibility of a woman-focused drug court model of treatment.

All of the above specific aims have been accomplished. With the help of the offices of the Los Angeles County Alcohol and Drug Abuse Program Administration (ADPA), the UCLA Addiction Technology Transfer Center (UCLA ATTC), and ONTRACK Program Services, three separate trainings were conducted. At the completion of the trainings, project staff asked participants to fill out evaluations. The evaluations captured data on participants' perceptions of the materials' and guidelines' usefulness and appropriateness. Each of the three trainings resulted in very positive feedback from the participants. In fact, the TOWAR team was extensively questioned about when the TOWAR training and toolkit would be complete. Feedback obtained during this study will be used to finalize materials during the Phase II portion of this study.

TOWAR: A Comprehensive Training on Women's Addiction and Recovery was funded by the National Institute on Drug Abuse, grant No. 1 R41 DA022101-01A2, from January 2009 to December 2010.

Women, Methamphetamine, and Sex

Alison Hamilton, Ph.D., M.P.H. Principal Investigator
(alisonh@ucla.edu)

This 5-year project focused on the relationship between methamphetamine (MA) and sex among women MA users. Thirty women in residential treatment participated in in-depth interviews. They were asked about their history of using MA and other substances, their life experiences (including any trauma or abuse they may have experienced), and their perspectives on how MA has affected their lives, specifically their intimate relationships and sexual behaviors. In the follow-up phase, these participants were interviewed about their experiences since the first interview. Recovery, relapse, intimate relationships, and several other topics were explored. As a career development award, the project also involved

training for the principal investigator (PI) in public health and community health sciences. This study adds to the body of literature on the impact of substance abuse on life experiences. Considering that women who abuse substances such as MA typically have multiple factors placing them at risk for poor sexual decision-making (e.g., histories of violence and abuse), a more in-depth understanding of how women MA users conceptualize their sexual behaviors and experiences could assist in developing interventions for them. The PI's co-mentors on the project were Drs. Richard Rawson (UCLA ISAP), Yih-Ing Hser (UCLA ISAP), and Vivian Brown (PROTOTYPES).

Related Publications:

- Hamilton, A., Goeders, N. (2010). Violence perpetrated by women who use methamphetamine. *Journal of Substance Use, 15* (5), 313–329.
- Hamilton, A. (In press). The vital juncture of methamphetamine-involved pregnancy: Objective risks and subjective realities. In *Responsible Reproduction? Social and Biomedical Constructions of Reproductive Risk*, Lauren Fordyce & Aminata Maraesa, Editors. Vanderbilt University Press.

Women, Methamphetamine and Sex was funded by the National Institute on Drug Abuse, grant 1 K01 DA017647, from April 2006 through March 2011.

Alphabetical Listing of Projects

2010–2011 NIDA INVEST Research Fellowship for Saeed Montazi, M.D. (Training and Dissemination), 68

2011-2012 NIDA INVEST Research Fellowship for Dr. Xuyi Wang (Training and Dissemination), 69

A Comparison of Methadone Treatment Systems in California and British Columbia (Natural History / Treatment Process and Outcomes), 55

A Long-term Follow-up Study of Drug-Dependent Mothers and their Children (Women's Substance Use Disorder Issues), 73

A Parenting Intervention for HIV+ Moms: The IMAGE Program (HIV/AIDS), 51

A Phase 2, Double-Blind, Placebo-Controlled Trial of Bupropion for Methamphetamine Dependence (Clinical Trials and Medication Development), 35

A Randomized Controlled Trial of the Second Chance Program for Ex-Inmates (Criminal Justice Populations), 41

Aerobic Exercise to Improve Outcomes of Treatment for Methamphetamine Dependence (Clinical Trials and Medication Development), 35

An Experimental Comparison of Telepsychiatry and Conventional Psychiatry for Mentally Ill Parolees (Criminal Justice Populations), 41

Brief Intervention for Alcohol Misuse Among Elderly Latino Day Laborers (Special Populations and Topics), 63

California Addiction Training and Education Series (CATES) (Training and Dissemination), 69

Cell Phone Technology Targeting ART & Suboxone Adherence and Injection Drug Use (Clinical Trials and Medication Development), 36

Center for Advancing Longitudinal Drug Abuse Research (CALDAR) (Natural History/Treatment Process and Outcomes), 55

Center for HIV Identification, Prevention and Treatment Services (HIV/AIDS), 51

Cognitive Neuroscience of Decision Making in Recovery from Alcoholism (Basic Science/Neurophysiology/Imaging Projects), 34

Computerized Psychosocial Treatment for Offenders with Substance Use Disorders (Criminal Justice Populations), 42

Development of Childhood Obesity and High-risk Behavior Engagement in Adolescence (Special Populations and Topics), 63

Drug Demand Reduction Initiative for Iraq (International Research and Training), 53

Drum-Assisted Recovery Therapy for Native Americans (Special Populations and Topics), 64

Duloxetine for Depressed Substance Abusers (Clinical Trials and Medication Development), 36

Effectiveness of Residential vs. Intensive Outpatient Prison-Based Treatment (Criminal Justice Populations), 42

Enhancing Follow-Up Rates Through a Rechargeable Incentive Card (RIC) System (Special Populations and Topics), 64

Enhancing Substance Abuse Treatment Services for Women Offenders (Criminal Justice Populations), 43

Evaluation of HealthRight 360 Pregnant and Parenting Women's Treatment Program (Women's Substance Use Disorders Issues), 75

Evaluation of Horizon's Integrated AODA Treatment/HIV Services for Justice-Involved Women (Program Evaluation), 58

Evaluation of Illness Management & Recovery (IMR) Project at Substance Abuse Treatment Facility at Corcoran State Prison (Criminal Justice Populations), 44

Evaluation of People in Progress's New Elements Treatment for Homeless Program (Program Evaluation), 58

Evaluation of the Bridges to Housing Project (Program Evaluation), 59

Evaluation of the Community Bridges Project (Program Evaluation), 59

Evaluation of the Homeless Co-Occurring Treatment Program (Program Evaluation), 60

Evaluation of the Liberating our Families from Drugs and Incarceration Program (Program Evaluation), 60

Evaluation of the P3BENEFITS Program (Criminal Justice Populations), 44

Evaluation of the Substance Abuse and Crime Prevention Act of 2000 (Criminal Justice Populations), 44

Evaluation of Trauma Informed Substance Abuse Treatment (TI-SAT) (Program Evaluation), 60

Evaluation Services to Enhance the Data Management System in California (Program Evaluation), 61

Evaluation, Training, and Technical Assistance for Substance Use Disorder Services Integration (Health Care Reform and Integration of Substance Abuse Treatment with Primary Care & Training and Dissemination), 49

Expectations of "Recovery" – Changes Associated with Seeking and Entering Treatment (Natural History/Treatment Process and Outcomes), 56

Expert Panel for the Inmate Classification Study (Criminal Justice Populations), 45

Exploring Proposition 36 as a Turning Point in Life Course Drug-Use Trajectories (Criminal Justice Populations), 45

Four Models of Telephone Support for Stimulant Recovery (Natural History/Treatment Process and Outcomes), 56

Gender-Responsive Treatment for Women Offenders (Criminal Justice Populations), 46

HIV/AIDS: Translational Approaches and Health Disparities (Training and Dissemination), 70

Alphabetical Listing of Projects

- Improving Methadone Maintenance Treatment Compliance and Outcomes in China (International Projects), 53
- Inside Prescription Drug Abuse – A Web-based Multimedia Resource for Prescription Opiate Treatment (Special Populations and Topics), 65
- Integration of Substance Use Disorder Treatment with Primary Care in Preparation for Health Care Reform (Health Care Reform and Integration of Substance Abuse Treatment with Primary Care & Substance Use Disorders Policy), 50
- It Came from the North: Estimating the Production of Synthetic Drugs in Quebec, Canada (International Research and Training), 53
- Kern County Project CARE Evaluation (Program Evaluation & Health Care Reform and Integration of Substance Abuse Treatment with Primary Care), 50
- Longitudinal Study of Maternal HIV on their Late Adolescent/Early Adult Children (HIV/AIDS), 51
- Los Angeles County, Department of Mental Health Co-Occurring Disorder Training Program (Training and Dissemination), 70
- Los Angeles County Department of Mental Health Performance Outcomes Survey (Program Evaluation), 62
- Los Angeles County Evaluation System (LACES): An Outcomes Reporting Program (Program Evaluation), 63
- Mental Health Characteristics and Service Utilization of Substance-Abusing Offenders in California (Criminal Justice Populations), 46
- Methamphetamine Abuse: Long-Term Trajectories, Correlates, Treatment Effects (Natural History/Treatment Process and Outcomes), 56
- Mindfulness-Based Relapse Prevention for Stimulant Users (Clinical Trials and Medication Development), 37
- Mobile Continuing Care Approach for Youth (Special Populations and Topics), 65
- Modeling Risk and Protective Factors for Well-being of Maltreated Youth (Special Populations and Topics), 65
- Motivational Therapy for Substance Users with Depression (Clinical Trials and Medication Development), 38
- Optimizing Outcomes Using Suboxone for Opiate Dependence (Clinical Trials and Medication Development), 38
- Orange County Health Care Agency – Screening, Brief Intervention, and Referral to Treatment (SBIRT) Training Program (Training and Dissemination), 71
- Pacific Coast Research Center of CJ-DATS2 (Criminal Justice Populations), 47
- Prenatal Methamphetamine Exposure and School Age Outcome (Special Populations and Topics), 66
- PRO 806: A Randomized, Placebo and Active-Controlled, Multi-Center Study of Probuphine in Patients with Opioid Dependence (Clinical Trials and Medication Development), 39
- PRO-811: A Phase 3, Six-Month, Open-Label Re-Treatment Study of Probuphine in Opioid Addiction (Clinical Trials and Medication Development), 39
- Project BRITE: Behavioral Reinforcement to Increase Treatment Engagement (Criminal Justice Populations), 47
- Reducing HIV/AIDS and Drug Abuse: Linking Compulsory Rehabilitation to Methadone Maintenance (International Projects), 54
- Reducing Unhealthy Alcohol Use in Older Hispanic Laborers (Special Populations and Topics), 67
- Refinement and Validation of a Portable, Salivary Biosensor of Psychosocial Stress (Basic Science/Neurophysiology/Imaging), 34
- Research on Racial and Ethnic Disparities in Access to Mental Health Care and Addiction-Related Outcomes among Clients of Public Sector Substance Abuse Treatment Programs in California (Natural History/Treatment Process and Outcomes), 57
- Screening, Brief Intervention, and Referral to Treatment (SBIRT) with Offenders (Criminal Justice Populations), 48
- Substance Abuse Research Consortium State Contract (Training and Dissemination), 71
- Sustained-Release Methylphenidate for Management of Methamphetamine Use Disorders (Clinical Trials and Medication Development), 40
- The National Drug Abuse Clinical Trials Network (Clinical Trials and Medication Development), 40
- The Oral and Dental Consequences of Methamphetamine Use (Basic Science/Neurophysiology/Imaging), 34
- The Pacific Southwest Addiction Technology Transfer Center (Training and Dissemination), 72
- TOWAR: A Comprehensive Training on Women's Addiction and Recovery (Women's Substance Use Disorder Issues), 78
- Trajectories of HIV Sexual Risks: Impacts of Drug Use, Mental Health, and Criminality (HIV/AIDS), 52
- UCLA Pre and Postdoctoral Training Program (Training and Dissemination), 72
- Using Incentives to Improve Parolee Participation and Retention in Community Treatment (Criminal Justice Populations), 48
- Vietnam HIV-Addiction Technology Transfer Center: VHATTC (International Research and Training), 54
- Women, Methamphetamine, and Sex (Special Populations and Topics), 67

UCLA Affiliates

UCLA Center for Addictive Behaviors

The mission of the Center for Addictive Behaviors is to discover fundamental mechanisms that link addictive disorders (drug abuse and smoking) and their behaviors with neurochemical phenotype and genotype in healthy individuals and in those who suffer from neuropsychiatric diseases. The Center's work focuses on two major areas:

- Research on the biological basis of addictive disorders
- Development of new probes for noninvasive imaging, including methods to visualize gene expression.

Spread among the West Los Angeles Veteran's Administration, the UCLA Semel Institute & Resnick Neuropsychiatric Hospital, and the Ahmanson-Lovelace Brain Mapping Center, the Center for Addictive Behaviors uses cutting-edge noninvasive in vivo imaging techniques in its research, placing it at the forefront of drug addiction behavioral research.

In addition to research, the center delivers a variety of courses in drug addiction and abuse, including training in translational research on drug abuse.

For more information, visit the Center for Addictive Behaviors at <http://www.semel.ucla.edu/cab>.

UCLA Center for Community Health/ CHIPTS

The Center for HIV Identification, Prevention, and Treatment Services (CHIPTS), funded by the National Institute of Mental Health, leverages world class science to combat HIV globally, in partnership with communities, families, and individuals impacted by the pandemic. Strategies for integrating, promoting, and diffusing HIV detection, prevention, and care is the primary mission of CHIPTS. Investigators from UCLA, Friends Research Institute, the Los Angeles County Department of Public Health, and research and community partners globally collaborate to achieve CHIPTS' mission. CHIPTS creates

opportunities for scientific leadership, expertise, and infrastructure to create, understand, and evaluate: (1) structural and community level interventions; (2) models of adaptation and adoption of efficacious interventions; (3) strategies to reduce disparities for scientists, nations, communities, and individuals; and (4) research agendas that integrate behavioral, biomedical, and technological intervention strategies. ISAP researchers involved in CHIPTS are Drs. Debra A. Murphy and Cathy Reback.

For more information, visit <http://chipts.ucla.edu>.

UCLA Hatos Center for Neuropharmacology

The Stefan and Shirley Hatos Center for Neuropharmacology focuses on research concerned with addictive drugs, including opioids, nicotine, and psychostimulants. It is also home to the Center for Study of Opioid Receptors and Drugs of Abuse (CSORDA), which is supported by the National Institute on Drug Abuse (NIDA). CSORDA investigates opioid systems at the molecular, cellular, and behavioral levels.

For more information, visit <http://www.semel.ucla.edu/hatos/csorda>.

Community Affiliates

Friends Research Institute, Inc.

For over 50 years, researchers at Friends Research Institute (FRI) have received federal, state, county, and private funding to conduct studies in the fields of substance abuse, health, HIV/AIDS, mental health, and criminal justice. That history includes a 38-year collaboration with ISAP Director Dr. Walter Ling and a 23-year history with Associate Director Dr. Richard Rawson. Several FRI researchers, including Dr. Cathy Reback, have collaborated with UCLA investigators to develop cutting-edge treatment and research programs.

Recent FRI research has focused on the development and assessment of innovative strategies in pharmacotherapy, psychosocial treatments, biobehavioral HIV interventions, and prevention. Research at FRI is conducted by an interdisciplinary group of social scientists whose work has garnered widespread recognition resulting from its contribution to both scientific knowledge and clinical practice. Presently, research studies and clinical trials are being conducted by FRI investigators both within the United States and throughout other parts of the world. FRI remains committed to contributing to the well-being of society through studies designed to alleviate health and social problems facing communities.

For more information, visit www.friendsresearch.org.

Clinical Trials Network (CTN) Community Treatment Programs

Bay Area Addiction Research and Treatment (BAART) Programs

Headquartered in San Francisco, BAART Programs is a multi-service organization providing drug treatment and rehabilitation for patients across the country. In addition to drug addiction treatment, BAART Programs provides primary medical care and mental health services through a network of fixed sites and mobile vans. Now serving five states and over 6,500 people per day, BAART provides state-of-the-art drug treatment, mental health, and medical services through a dedicated staff committed to offering personal, caring, and individual attention to each patient. Our quality care has been recognized by state and federal

governments, accreditation organizations, as well as patients and their families.

For more information, visit www.baartprograms.com.

Betty Ford Center

The nonprofit Betty Ford Center, in Rancho Mirage, CA, is a licensed chemical dependency recovery hospital. The Center provides alcohol and other drug dependency treatment services, including educational and research programs, to help women, men, and families begin the process of recovery. The Center emphasizes the involvement of the entire family in the recovery process and stresses the importance of each person identifying his or her own spiritual path. The Center has an Inpatient Treatment Program, Residential Day Treatment Program, Intensive Outpatient Program, Specialized Treatment for Licensed Professionals, and a Pain Management Track, as well as programs for families and children.

For more information, visit www.bettyfordcenter.org.

Hina Mauka

Hina Mauka, in Hawaii, has a 40-year history of successfully helping people with addictions, using evidence-based practices to assist them achieve their goals of overcoming dependence on alcohol and other drugs. The mission of Hina Mauka is to provide prevention, treatment, and recovery services to individuals, families, and communities touched by alcoholism, chemical dependency, and related challenges.

Hina Mauka offers treatment for adults through several levels of care including Residential Treatment, Day Treatment, Outpatient Treatment, and Aftercare. Hina Mauka also provides innovative treatment programs for homeless people and incarcerated women, as well as school-based adolescent outpatient treatment at 20 high schools and middle schools on Oahu and Kauai.

For more information, visit <http://hinamauka.org/>.

Community Affiliates

Matrix Institute on Addictions

The Matrix Institute on Addictions, located in the Los Angeles area, was established in 1984 to promote a greater understanding of addiction disorders and to improve the quality and availability of addiction treatment services. The Institute's mission is to improve the lives of individuals and families affected by alcohol and other drug use through treatment, education and training, and research, promoting a greater understanding of addiction disorders.

The Matrix approach emphasizes the use of outpatient techniques. Treatments focus on lifestyle changes, training in relapse prevention, education about dependencies, 12-step facilitation, and family involvement.

The Matrix Model is listed on the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Registry of Evidence-based Programs and Practices (NREPP). This prestigious listing is based on the cumulative data from evaluations of the Matrix Model over the past 25 years. The Matrix Institute is accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF) and is a member of the National Association of Addiction Treatment Providers (NAATP).

For more information, visit www.matrixinstitute.org.

Tarzana Treatment Centers

Tarzana Treatment Centers, Inc., is a full-service behavioral healthcare organization that provides high quality, affordable behavioral healthcare and addiction treatment services in Los Angeles County. Tarzana is a nonprofit, community-based organization that operates a psychiatric hospital, residential and outpatient alcohol and drug treatment centers, adolescent drug treatment centers, and family medical clinics. All facilities are licensed and certified by the State of California and the County of Los Angeles and are accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Tarzana Treatment Centers have provided a comprehensive continuum of healthcare services since 1972.

For more information, visit www.tarzanatc.org.

