

2020 URBAN ARCH ANNUAL MEETING



Uganda Russia Boston Alcohol Network for
Alcohol Research Collaboration on HIV/AIDS

Program Booklet
March 12, 2020

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URBAN ARCH Annual Meeting

The objectives of the URBAN ARCH Annual Meeting are to bring together URBAN ARCH investigators, staff, and collaborators to do the following:

- Update the Scientific Advisory Panel and receive feedback on progress and challenges
- Discuss emerging issues at the intersection of HIV and alcohol research to identify future research directions
- Discuss proposals for the next wave of HIV/alcohol research
- Examine URBAN ARCH data in collaboration with external investigators
- Engage trainees in HIV and alcohol research domestically and internationally

THURSDAY, MARCH 12

8:00 – 8:30	Continental breakfast available	Crosstown 2128	All attendees
8:30 – 8:45	Welcome & Introductions	Crosstown 2128	Samet, Bryant
8:45 – 9:00	URBAN ARCH Overview and Core Updates	Crosstown 2128	Samet, Cheng
9:00-9:30	Uganda Study Update and Future Direction	Crosstown 2128	Judy Hahn
9:30-10:00	Russia Study Update and Future Direction	Crosstown 2128	Matthew Freiberg
10:00-10:30	Boston Study Update and Future Direction	Crosstown 2128	Richard Saitz
10:30 – 10:45	COFFEE BREAK AND TRANSITION TO BREAK OUT SESSION		
10:45 – 11:30	Cohort Breakout Sessions- Questions from the Scientific Advisory Panel		Attendees choose one
	<i>Russia Cohort</i>	Crosstown 2128A	
	<i>Uganda Cohort</i>	Crosstown 2128B	
	<i>Boston Cohort</i>	Crosstown 2061	
	<i>Biostatistics and Data Management</i>	Crosstown 2020	
11:35 – 11:45	GROUP PHOTO	Crosstown Lobby	All attendees
11:45 – 12:30	LUNCH	Crosstown 2128	All attendees
12:30 – 1:30	URBAN ARCH Keynote Address	Crosstown 2128	Seth Kalichman
1:30 – 1:45	Providence-Boston CFAR Announcements	Crosstown 2128	Lunze/Goulet
1:45 – 2:00	Closing Remarks and Feedback	Crosstown 2128	Jeffrey Samet
2:00	ADJOURN OPEN MEETING / TRANSITION TO CLOSED MEETING		

We will be posting PowerPoint presentations on our website (urbanarch.org) after the meeting.



Uganda Russia Boston Alcohol Network for
Alcohol Research Collaboration on HIV/AIDS

2nd funding period (2016–2021)

The **Uganda Russia Boston Alcohol Network for Alcohol Research Collaboration on HIV/AIDS (URBAN ARCH)** Consortium was initially funded by NIAAA in September 2011 to carry out cohort and intervention studies to address gaps in our understanding about HIV and alcohol. The central goal of the URBAN ARCH Consortium is to examine the consequences of alcohol use on comorbidities among people living with HIV, including tuberculosis (TB), cardiovascular disease, and falls so as to increase availability of treatments and improve outcomes. The Consortium studies build upon three existing HIV-positive cohorts from Boston, Uganda, and Russia with distinctive strengths and well-characterized alcohol consumption patterns. The three cohorts are integrated in terms of characteristics and common measures, which has allowed for the evolution of cross-cohort studies. Moreover, samples collected from all three cohorts are stored in a centralized repository for future use.

Administrative Coordinating (Admin) Core – URBAN ARCH Consortium U24AA020778 (JH Samet)

The Administrative Coordinating Core ensures that the scientific and programmatic goals of the URBAN ARCH Consortium are achieved with high quality and timeliness. The Admin Core oversees the data and sample repository and encourages collaboration with investigators within and outside the Consortium.

Biostatistics and Data Management (BDM) Core – URBAN ARCH Consortium U24AA020779 (DM Cheng)

The principal objectives of the Biostatistics and Data Management Core are to provide active statistical collaboration in the design and analysis of each individual study and to develop and maintain an integrated, centralized data management system that may be used by all studies within the URBAN ARCH Consortium.

**Uganda Cohort – TB Preventive Therapy for HIV-infected Alcohol Users in Uganda:
An Evaluation of Safety, Tolerability, and Adherence** U01AA020776 (JA Hahn)

Alcohol Drinkers' Exposure to Preventive Therapy for TB (ADEPTT) will examine the safety and tolerability of tuberculosis (TB) preventive therapy for HIV-infected drinkers. The study (n=300) will also estimate the level of adherence to TB preventive therapy overall, by month on therapy and by drinking level, and determine whether the clinical benefits of TB preventive therapy outweigh toxicity risks for HIV infected drinkers in resource-limited settings.

**Russia Cohort – Targeting HIV-Comorbidities with Pharmacotherapy to Reduce
Alcohol and Tobacco Use in HIV-infected Russians** U01AA020780 (JH Samet/
MS Freiberg/HA Tindle)

The **Studying Partial-agonists for Ethanol and Tobacco Elimination in Russians with HIV (St PETER HIV)** study, a randomized controlled trial (n=400), will compare the effects of varenicline, cytisine, and nicotine replacement therapy to reduce alcohol use and craving, smoking, and inflammation and risk for cardiovascular disease among people living with HIV.

**Boston Cohort – Alcohol and HIV-associated Comorbidity and Complications:
Frailty, Functional Impairment, Falls, and Fractures (The 4F Study)** U01AA020784 (R Saitz)

The 4F study (n=400) will test the associations between alcohol (and illicit drugs and polypharmacy), falls, and fractures and whether frailty mediates these associations in people living with HIV infection as well as develop and pilot test the feasibility of a falls prevention intervention.



Uganda Russia Boston Alcohol Network for
Alcohol Research Collaboration on HIV/AIDS

URBAN ARCH Affiliated Studies Funded Since 2017

Since 2017, eight new grants were awarded by NIH to the **Uganda Russia Boston Alcohol Network for Alcohol Research Collaboration on HIV/AIDS (URBAN ARCH)** Consortium that will extend the scope of our HIV/alcohol research and allow for new work examining comorbidities that are common among people living with HIV. These studies will advance URBAN ARCH's mission to conduct interdisciplinary research aimed at understanding how alcohol use impacts people living with HIV and to develop interventions to reduce alcohol use as well as alcohol and HIV-related consequences in this population.

Mobile Technology to Extend Clinic-Based Counseling For HIV+ in Uganda

R01AA024990 (JA Hahn)

4/1/17–3/31/21

This study is a randomized control trial (n=270) that aims to conduct formative work to adapt an existing brief alcohol intervention and develop two-way tailored mobile phone based messages as booster sessions, with the goal of reducing unhealthy drinking and increasing viral suppression in persons with HIV in Uganda.

1/2 Alcohol Associated Comorbidities and Microbiome Evaluation in HIV (ACME HIV)

U01AA026222 (MS Freiberg / SS Barve)

8/1/17–7/31/22

The goal of this study (n=200) is to determine if alcohol consumption changes the type of bacteria that are present in the gut. It will then determine if these changes in the bacteria of the gut are associated with changes in gut leakiness, levels of inflammation in the blood, and changes in the structure and function of the heart. This study will enroll a subset of St PETER HIV trial participants.

St PETER HIV-Alcohol, Protein Biomarkers and Cardiovascular Disease Risk Alcohol and Tobacco Use in HIV-infected Russians

R01AA025859 (MS Freiberg / JH Samet)

9/15/17–8/31/20

This study (n=360) will assess whether heavier alcohol use is associated with increased trimethylamine N-oxide (TMAO), and subsequently whether increased TMAO levels are associated with subclinical measures and biomarkers of heart failure. A subset of St PETER HIV trial participants will be asked to participate.

Internet-Based Video Conferencing to Address Alcohol Use and Pain Among Heavy Drinkers in HIV-Care

UH2AA026192 (T Palfai)

9/15/17–8/31/19

The goal of this study n=12 (in the UH2 phase) was to develop a novel, integrated behavioral approach to reduce heavy drinking and chronic pain among patients in HIV-care, delivered via internet-based videoconferencing. A subset of Boston ARCH participants were asked to participate.

Interventions to Reduce Alcohol Use and Increase Adherence to TB Preventive Therapy Among HIV/TB Co-infected Drinkers (DIPT 1/2)

U01AA026223 (JA Hahn)

9/15/17–8/31/22

The goal of this study (n=800) is to test an intervention in the Uganda ARCH cohort in which participants will receive a reward for reduced alcohol intake and for adherence to INH treatment, in order to see whether this will reduce alcohol use and increase adherence to TB preventative therapy.

Pilot Study of Opioid-receptor Antagonists to Reduce Pain and Inflammation Among HIV-Infected Persons with Alcohol Problems

UH2AA026193 (J Tsui / JH Samet)

9/20/17–8/31/19

This study n=16 (in the UH2 phase) pilot tested novel pharmacotherapies (opioid receptor antagonists) to improve chronic pain among HIV-positive heavy drinkers, and explored the hypothesis that the mechanism of action for improving pain is through decreased inflammation. A subset of Russia ARCH participants were asked to participate.

Internet-Based Video Conferencing to Address Alcohol Use and Pain Among Heavy Drinkers in HIV-Care

UH3AA026192 (T Palfai)

9/20/19–8/30/22

The goal of this study n=48 (in the UH3 phase) is to compare the Motivation and Cognitive-Behavioral Management of Alcohol and Pain intervention to treatment as usual in order to obtain effect size estimates of intervention efficacy, with the potential of implementing this intervention as part of a larger clinical trial. A subset of Boston ARCH participants will be asked to participate.

Pilot Study of Opioid-receptor Antagonists to Reduce Pain and Inflammation Among HIV-Infected Persons with Alcohol Problems

UH3AA026193 (J Tsui / JH Samet)

9/20/19–8/31/22

This study n=45 (in the UH3 phase) will compare the effects of low-dose naltrexone or gabapentin to placebo on improving pain, inflammation, and measures of HIV control among HIV-positive heavy drinkers. A subset of Russia ARCH participants will be asked to participate.



Uganda Russia Boston Alcohol Network for
Alcohol Research Collaboration on HIV/AIDS

Initial funding period (2011–2016)

The **Uganda Russia Boston Alcohol Network for Alcohol Research Collaboration on HIV/AIDS (URBAN ARCH)** Consortium was funded by NIAAA in September 2011 to carry out cohort and intervention studies to address gaps in our understanding about HIV and alcohol. The central goal of the URBAN ARCH Consortium is to examine the consequences of alcohol on HIV disease and to mitigate its harmful effects. The Consortium studies build upon three existing HIV-infected cohorts from Boston, Uganda, and Russia with distinctive strengths and well-characterized alcohol consumption patterns. The three cohorts are integrated in terms of characteristics and common measures, which will allow evolution of cross-cohort studies. Moreover, samples collected from all three cohorts are stored in a centralized repository for future use.

Administrative Coordinating Core – URBAN ARCH Consortium

U24AA020778 (JH Samet)

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Biostatistics and Data Management (BDM) Core – URBAN ARCH Consortium

U24AA020779 (DM Cheng)

The principal objectives of the Biostatistics and Data Management Core were to provide active statistical collaboration in the design and analysis of each individual study and to develop and maintain an integrated, centralized data management system that may be used by all studies within the URBAN ARCH Consortium.

Impact of Heavy Alcohol Use on Pre-ART HIV Disease – Uganda ARCH Cohort

U01AA020776 (JA Hahn)

This was a 484-person prospective cohort study to determine the effect of heavy alcohol consumption (self-report and PEth) on HIV disease progression (i.e., CD4) prior to the start of antiretroviral therapy in Mbarara, Uganda.

Alcohol and Zinc Impact on Inflammatory Markers in HIV Disease – Russia ARCH Cohort

U01AA020780 (JH Samet)

The Russia ARCH Cohort examined a cohort of 400 HIV-positive, ART-naïve Russians with a spectrum of alcohol use to determine alcohol's impact on biomarkers reflecting microbial translocation.

Zinc for HIV Disease among Alcohol Users – An RCT in the Russia ARCH Cohort

U01AA021989 (MS Freiberg/JH Samet)

This double-blinded randomized controlled trial assessed the efficacy of zinc supplementation vs. placebo on improving markers of mortality, HIV disease progression, acute MI risk, microbial translocation, and inflammation among 250 HIV-positive Russians, who were ART-naïve at enrollment and had a recent history of heavy drinking.

Addressing Alcohol/HIV Consequences in Substance Dependence – Boston ARCH Cohort

U01AA020784 (R Saitz)

The Boston ARCH Cohort (n=250) aimed to accurately characterize alcohol use and consequences in people with HIV infection affected by multiple substances and looked prospectively at impact on bone health.



URBAN ARCH II Data Collected in All Cohort Baseline Questionnaires

Measure/Variable
Demographics
Gender
Date of birth or Age
Education
Marital status
Partner HIV status*
Housing
Incarceration
Employment
HIV & HCV
HIV diagnosis date†
HCV testing and treatment†
OI history† ‡
HIV transmission risk categorization‡
HIV symptom index
ART use†
Alcohol Use
Recent alcohol use/TLFB
Recent alcohol use/AUDIT-C*
Alcohol use disorder
Alcohol consequences‡
Other Substance Use
Drug use history
Tobacco use
Other tobacco/nicotine
Physical Health
VR-12 health survey
Healthcare utilization
TB testing and treatment
Falls
Mental Health
Depressive Symptoms (CES-D) (past week)
Social Support Scale

*Boston ARCH/4F does not collect.

†Boston ARCH/4F collects from medical record.

‡Uganda ARCH/ADEPTT does not collect.



URBAN ARCH Clinical Values and Samples Collected at Baseline or Screening Uganda (ADEPTT), Russia (St PETER), and Boston (4F Study)

Tests Conducted	ADEPTT	St PETER	4F Study
HIV & Hepatitis			
CD4	x	x	x
Hep B	x		x
HCV Ab		x	x
HIV Antibody or Rapid HIV Test	x	x	x
HIV Viral Load	x	x	x
Heart, Kidney, Liver, & Lung Function			
AST/ALT	x	x	x
Blood Pressure	x	x	
Cholesterol		x	
CO		x	
Confirmatory TB (sputum)	x		
eGFR (creatinine)	x	x	x
HS CRP		x	
Substance Use			
BAC		x	x
Nicotine Metabolites (urine)		x	
PEth	x		
Other Clinical Values			
CBC	x		x
Height	x	x	x
Hemoglobin		x	x
Platelets		x	x
Pregnancy (urine)	x	x	
Weight	x	x	x
Samples for Storage			
Hair	x		
Heparin Plasma and PBMCs		x	
Plasma	x	x	
Saliva			x
Serum		x	
Whole Blood	Dried Blood Spots	Dried Blood Spots 5ml Tube	

URBAN ARCH Scientific Advisory Panel

Kenneth A. Freedberg, MD, MSc

*Director, Medical Practice Evaluation Center
Massachusetts General Hospital
Director, Program in Epidemiology and Outcomes Research
Harvard University Center for AIDS Research
Professor of Medicine, Harvard Medical School*
kfreedberg@mg.harvard.edu



Kenneth A. Freedberg is Professor of Medicine at Harvard Medical School and Massachusetts General Hospital (MGH) and Director of the Medical Practice Evaluation Center at MGH. He also directs the Program in Epidemiology and Outcomes Research at the Harvard University Center for AIDS Research. His research interests focus on HIV and TB, as well as other chronic diseases (including substance use disorders, cardiovascular disease, and genomics and precision medicine). His focus is on clinical outcomes and health policy, using the methods of cost-effectiveness analysis, clinical epidemiology, and implementation science. His current research efforts are in the United States, as well as in India, France, Spain, Estonia, Brazil, South Africa, Côte d'Ivoire, Zimbabwe, Botswana, and Mozambique, as well as with multiple clinical trials groups. His NIH-funded research examines clinical policies for antiretroviral use, HIV testing, laboratory management, PrEP, and HIV/TB co-infection. His group has a particular interest in informing guidelines in individual countries and across regions in both well-resourced and more resource-limited settings.

Victor Hesselbrock, PhD

*Professor of Psychiatry and Vice Chair of Department of Psychiatry
Endowed Chair in Addiction Studies, Health Net, Inc.
Senior Associate Dean of Research, UCONN School of Medicine
CICATS Associate Director and Chief Scientific Officer
University of Connecticut Health Center*
hesselbrock@uchc.edu



Victor Hesselbrock holds the Physicians' Health Services Endowed Chair in Addiction Studies and is Principal Investigator and Scientific Director of the Department's NIAAA-funded Alcohol Research Center. A member of the Department since 1978, Dr. Hesselbrock has developed a program of research focused on the identification of psychological and biological factors that contribute to the susceptibility for developing alcohol problems, including dependence. His current projects include a study of the deviance-proneness model of alcoholism vulnerability, a study of alcohol dependence phenotypes among Alaskan Natives, and two studies related to the genetics of substance dependence. These include being a co-PI for the Collaborative Study on the Genetics of Alcoholism (COGA) and being an investigator in multi-site studies of the genetics of cocaine and opiate dependence. Dr. Hesselbrock also is chairperson of the Scientific Advisory Committee of the Medical School's General Clinical Research Center. He serves as an associate editor for *Alcoholism: Clinical & Experimental Research*, is an assistant editor for *Addiction*, and is on the editorial boards of several other addiction journals. He has also served on, and chaired, several NIH study sections and is a former member of the National Advisory Council of the National Institute on Alcoholism and Alcohol Abuse (NIAAA) and the NIH Council of Councils. Dr. Hesselbrock is a past President of the Research Society on Alcoholism (RSA).

Amy C. Justice, MD, PhD

CNH Long Professor of Medicine and of Public Health, Yale University

Staff Physician, VA Connecticut Healthcare System

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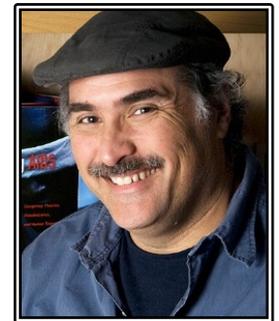
Amy C. Justice, MD, PhD is a Clinical Epidemiologist who has developed multiple large national cohorts based on data from the Veterans Affairs Healthcare System Electronic Medical Record enhanced with National Death Index and CMS data, patient completed surveys, DNA and tissue repositories, and stored pathology samples. She has two decades of experience in the processes required to clean, validate, and standardize raw EMR data and in its analysis using standard statistical methods, machine learning techniques, and cross cohort validations. The oldest and best known of her projects is the Veterans Aging Cohort Study (VACS). VACS is an ongoing, longitudinal study of >170,000 United States veterans with and without HIV infection continuously funded by National Institutes of Health (NIH) since 1996. She has developed and validated widely used indices including a prognostic index, the VACS Index, and a patient reported symptom index, the HIV Symptom Index. She is the principal investigator of the National Cancer Institute provocative questions grant HIV and Aging Mechanisms for Hepatocellular Cancer, has published over 400 peer reviewed manuscripts.

Seth Kalichman, PhD

Professor of Psychology

University of Connecticut

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Seth Kalichman dedicates his research to preventing the spread of HIV/AIDS and caring for those affected by the HIV epidemic. His research is focused in the southern United States and South Africa. His work has been continuously and exclusively funded by the National Institutes of Health since 1992. He was previously on the faculties of Loyola University of Chicago, Georgia State University, and the Medical College of Wisconsin where he worked under the direction of Jeffrey A. Kelly to help establish the Center for AIDS Intervention Research (CAIR). He is currently the director of the Southeast HIV and AIDS Research and Evaluation (SHARE) Project, a research program within the AIDS Survival Project in Atlanta, Georgia. His research in South Africa is in collaboration with the Human Sciences Research Council. Professor Kalichman serves on NIH grant review panels, has over 200 peer-reviewed journal articles, and has authored and edited five books in the area of HIV/AIDS prevention and care services, including *Positive Prevention*, recently published by Springer. He is also the current editor of the bimonthly journal *AIDS and Behavior*. Professor Kalichman was the recipient of the 1997 Early Career Award in Health Psychology from the American Psychological Association and the 2005 Distinguished Scientist Award from the Society for Behavioral Medicine.

Mimi Kim, ScD

Professor of Epidemiology and Population Health

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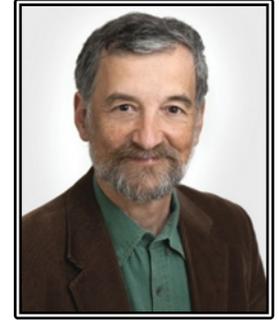


Dr. Mimi Kim is a professor in the Department of Epidemiology and Population Health at the Albert Einstein College of Medicine and has been Head of the Division of Biostatistics since 2003. She also directs the Biostatistics Shared Resource of the Institute of Clinical and Translational Research, and the Center for Quantitative Sciences. She is a Fellow of the American Statistical Association, on the Board of Trustees of the National Institute of Statistical Sciences, was Vice Chair of the American Statistical Association Council of Chapters Governing Board, and past President of the Korean International Statistical Society. She has been the lead statistician for large multicenter clinical trials and observations studies, and has participated on numerous grant review panels for the National Institutes of Health. Her research interests include multivariate and interval-censored survival data, the design and analysis of clinical trials, and epidemiologic methods.

URBAN ARCH Principal Investigators

Jeffrey Samet, MD, MA, MPH

Principal Investigator, URBAN ARCH, Russia ARCH Cohort
Chief, Section of General Internal Medicine, Boston Medical Center
John Noble, MD Professor in General Internal Medicine and Professor of Community Health Sciences
Boston University Schools of Medicine and Public Health
jsamet@bu.edu



Jeffrey Samet is the John Noble, MD Professor in General Internal Medicine and Professor of Public Health at Boston University and a practicing primary care physician at Boston Medical Center, with expertise treating substance use disorders in general healthcare settings and researching the impact of substance use on HIV infection. He is Chief of General Internal Medicine at Boston University School of Medicine/Boston Medical Center and Vice Chair for Public Health in the Department of Medicine. He is Editor-in-Chief of the journal *Addiction Science & Clinical Practice*. He is Principal Investigator of the NIAAA Alcohol-HIV Consortium, URBAN ARCH, several NIAAA and NIDA studies, two NIDA R25 grants to advance physician addiction education and research: the Clinical Addiction Research and Education (CARE) program and the Research in Addiction Medicine Scholars (RAMS) program advancing research careers for addiction subspecialty physicians. He is PI for the MA HEALing Communities Study. His international HIV work has occurred predominantly in Russia but also in India, Uganda, Ukraine, and Vietnam.

Shirish Barve, PhD

Principal Investigator, Russia ACME Study
Professor of Medicine, University of Louisville
shirish.barve@louisville.edu



Shirish Barve is a Professor of Medicine at the University of Louisville, in the Division of Gastroenterology, Hepatology & Nutrition. His research focuses on understanding alcohol-induced gut microbial dysbiosis/gut-barrier dysfunction and their role in the pathogenic alterations of the gut-liver-brain axis, the contribution of alcohol-induced peripheral endotoxemia and systemic inflammation in the development of neuroinflammation, and the potential of gut-dysbiosis/barrier dysfunction as a target for the development of effective treatment strategies for alcoholic liver disease and neuroinflammation. He and Dr. Freiberg are multiple PIs for the Alcohol Associated Comorbidities and Microbiome Evaluation in HIV study (ACME HIV).

Gabriel Chamie, MD, MPH

Principal Investigator, Uganda DIPT Study
Associate Professor of Medicine
University of California, San Francisco
gabriel.chamie@ucsf.edu



Gabriel Chamie is an Associate Professor of Medicine in Residence in the Division of HIV, Infectious Diseases and Global Medicine at the University of California, San Francisco (UCSF). Dr. Chamie has been conducting HIV and TB clinical and epidemiological research in sub-Saharan Africa since 2008. His research interests include community-based HIV testing and treatment, TB/HIV co-infection, TB preventive therapy and TB transmission dynamics in East Africa. He is a co-investigator in the SEARCH Trial of a universal “test and treat” approach in East Africa. He is Principal Investigator of the IBIS-Health study, investigating novel behavioral economic approaches to increase HIV testing and treatment in rural Uganda. He is PI of the Drinkers’ Intervention to Prevent TB (DIPT) study evaluating conditional incentives to reduce heavy alcohol use and to increase INH adherence during isoniazid preventive therapy among heavy drinking people living with TB/HIV co-infection. He has an active clinical practice in HIV and TB clinics and the inpatient Infectious Diseases Consult service at San Francisco General Hospital.

Debbie Cheng, ScD

Principal Investigator, Biostatistics and Data Management Core

Professor of Biostatistics

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Debbie Cheng is a Professor of Biostatistics and Associate Chair in the Department of Biostatistics at the Boston University School of Public Health. Her research interests include longitudinal data analyses and the design and analysis of clinical trials. She collaborates on several clinical trials and observational studies in the areas of substance abuse and HIV research.

Dr. Cheng is Principal Investigator of the Biostatistics and Data Management Core for the URBAN ARCH Consortium. She also Co-Directs the Biostatistics Core for the Providence/Boston Center for AIDS Research (CFAR). She has extensive experience working with clinical investigators, trainees, and students on study design, statistical analyses, interpretation of results, and the development of manuscripts. Dr. Cheng has been an instructor for courses in the design and conduct of clinical trials as well as statistical computing. She is a Statistical Editor for the Journal of Addiction Medicine and serves on the Editorial Board of *Addiction Science & Clinical Practice*.

Matthew Freiberg, MD, MSc

Principal Investigator, Russia ARCH Cohort

Director, Vanderbilt Center for Clinical Cardiovascular outcomes Research and Trials Evaluation (V-CREATE)

Professor of Medicine and the Dorothy and Laurence Grossman Chair in Cardiology

Vanderbilt University Medical Center

matthew.s.freiberg@vumc.org



Matthew Freiberg is an internal medicine physician and cardiovascular epidemiologist. In 2014, he joined Vanderbilt as an Associate Professor of Medicine in the Division of Cardiovascular Medicine, director of the Vanderbilt Center for Clinical Cardiovascular Outcomes Research and Trials Evaluation (V-CREATE), and a West End Home Foundation Scholar. He completed postgraduate training as a resident at University of Chicago Hospitals and fellowships at Boston University and with the Framingham Heart Study. His research interests include the impact of HIV, inflammation, altered immunity, and alcohol use on cardiovascular outcomes. He is also an expert in utilizing big data for clinical research initiatives. In addition to being an URBAN ARCH investigator, Dr. Freiberg has been a Veterans Aging Cohort Study (VACS) investigator for nearly 10 years. His current NIH grant portfolio includes two trials in the URBAN ARCH Russia Cohort and four R01s and one R56 in the VACS.

Judith Hahn, PhD, MA

Principal Investigator, Uganda ARCH Cohort

Professor in Residence

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Judith Hahn is a Professor in Residence in the Department of Epidemiology & Biostatistics at the University of California, San Francisco. She is an epidemiologist with extensive experience studying the behavioral and biological intersections of substance use and infectious diseases. Her work focuses on the impact of alcohol use on HIV outcomes in low resource settings, primarily in East Africa. She has led several domestic and international NIH-funded studies, and published over 100 peer-reviewed manuscripts. Dr. Hahn is a pioneer in the use of biological markers as objective measures for alcohol use. She is the PI of the Uganda URBAN ARCH U01 study, a large collaborative study to examine the safety and cost-benefit ratios of using isoniazid to prevent active tuberculosis (TB) among HIV/TB co-infected people with alcohol use. She is also leading studies to examine cost-effective interventions that leverage mobile phones and tablets to reduce the harm associated with heavy alcohol use. She is also the PI of the DIPT study to examine whether incentives can reduce drinking and increase adherence for people who are drinkers and co-infected with HIV and TB in Uganda. Dr. Hahn is a committed teacher and mentor, and has an NIH K24 award to support her mentoring.

Tibor Palfai, PhD

Principal Investigator, Boston (Internet-based video-conferencing to address alcohol use and pain among heavy drinkers in HIV-care)

Professor of Psychological & Brain Sciences

Program Director Clinical Psychology PhD Program

Boston University School of Arts and Sciences

palfai@bu.edu



Tibor Palfai is a Professor of Psychological & Brain Sciences at Boston University and the Program Director of the Clinical Psychology PhD program. His primary research interests are: (1) understanding the psychological processes that underlie health risk behaviors among those who use alcohol, (2) evaluating brief interventions for alcohol and substance use for patients in medical settings, and (3) developing technology-enhanced psychological interventions to reduce HIV-risk and address HIV-related comorbidities. His current HIV-related research includes studies on: (1) the development of a video-conferencing intervention to reduce pain and hazardous drinking among patients in HIV care, (2) the use of an integrated MI and text-messaging intervention for reducing hazardous drinking and sexual risk taking among MSM, and (3) processes that underlie the association between alcohol use and sexual decision making among MSM using laboratory alcohol administration and experience sampling methods.

Richard Saitz, MD, MPH, FACP, DFASAM

Principal Investigator, Boston ARCH Cohort

Chair, Department of Community Health Sciences; Professor of Community Health Sciences and Medicine

Boston University Schools of Public Health and Medicine

rsaitz@bu.edu



Richard Saitz is a general internist, primary care physician, and addiction medicine specialist. He is associate editor of *JAMA*, Editor-in-Chief of *Journal of Addiction Medicine*, Section Editor and sole author of key chapters in *UpToDate* on unhealthy substance use, an editor of the *ASAM Principles of Addiction Medicine* textbook, Editor Emeritus of *Addiction Science & Clinical Practice*, principal investigator of the Boston University Clinical Translational Science Institute, principal investigator of a multi-site NIDA Clinical Trials Network medication for opioid use disorder implementation study, and author of over two hundred peer-reviewed publications. He was also Director of Boston Medical Center's Clinical Addiction Research and Education (CARE) Unit for over a decade. His primary areas of expertise supported by NIH, RWJF, and SAMHSA are screening and brief intervention, integrating substance-related and general health care, improving the quality of care for people with unhealthy substance use, particularly in general health settings, and basing care on science.

Hilary Tindle, MD, MPH

Principal Investigator, Russia ARCH Cohort

Associate Professor of Medicine and the William Anderson Spickard, Jr., MD Chair in Medicine

Division of Internal Medicine & Public Health and Vanderbilt Ingram Cancer Center (VICC)

Vanderbilt University School of Medicine

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Hilary Tindle is a physician scientist, Associate Professor of Medicine, and William Anderson Spickard, Jr., MD Chair in Medicine at Vanderbilt University Medical Center (VUMC) where she founded and directs the Vanderbilt Center for Tobacco, Addiction, and Lifestyle (ViTAL). She has led multiple NIH-sponsored randomized controlled trials for smoking cessation, including an ongoing trial with members of the URBAN ARCH team to concomitantly treat smoking and unhealthy alcohol use. She also directs an inpatient Tobacco Treatment Service (TTS) at VUMC and an NCI Cancer Moonshot Initiative to reduce tobacco use among cancer patients. Dr. Tindle serves on the Board Directors for the North American Quitline Consortium (NAQC) to support tobacco quitlines, and as a standing member of the NIH Study Section Interventions to Prevent and Treat Addictions. Since 2015 she has contributed to the NCCN Smoking Cessation Guidelines for cancer patients, and in 2014 and 2020 she contributed to the Surgeon General's Reports on smoking and tobacco use.

Judith Tsui, MD, MPH

Principal Investigator, Russia (Pilot study of opioid-receptor antagonists to reduce pain and inflammation among HIV-infected persons with alcohol problems)

Associate Professor of Medicine

University of Washington School of Medicine

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Judith Tsui is an Associate Professor of Medicine at the University of Washington, based at Harborview Medical Center in Seattle, and an internist certified in Addiction Medicine. Her current research is focused on elucidating complex relationships between substance use disorders and co-morbidities (hepatitis C, HIV, and pain), and developing and testing clinical innovations in care delivery and pharmacotherapy (e.g. low-dose naltrexone in “Peter PAIN”). Current NIDA-funded PI research includes developing a community-pharmacy model to expand access to essential medications for persons who inject drugs and a pilot randomized trial of a mobile phone application for video-based directly observed therapy for buprenorphine treatment in a primary care office-based setting. She also has multi-site trial experience as co-PI of a data-coordinating center for the NIDA funded “Rural Opioid Initiative” and as site co-investigator on NIDA Clinical Trials Network studies. Upon joining University of Washington, she contributed to a successful grant to Substance Abuse and Mental Health Services (SAMHSA) to establish an office-based addictions treatment program at the Adult Medicine Clinic at Harborview Medical Center.

URBAN ARCH Co-Investigators and Staff

Sally Bendiks, MPH

Research Project Manager, Russia ARCH Cohort

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Sally Bendiks is a Research Project Manager in the Clinical Addiction Research and Education (CARE) Unit at Boston Medical Center. She works closely with Dr. Samet to manage NIH-funded research activities focused on HIV and substance use in St. Petersburg, Russia. She received her MPH from the Boston University School of Public Health and has been a part of the Clinical Addiction Research and Education (CARE) Unit since 2015.



Aga Bereznicka

Research Assistant, Russia ARCH Cohort

Boston Medical Center

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Aga Bereznicka is a Research Assistant in the Clinical Addiction Research and Education (CARE) Unit at Boston Medical Center. She has been assisting with NIH- & NIDA-funded research activities focused on HIV infection and substance use in St. Petersburg, Russia. Aga is also currently a student at Boston University School of Public Health where she is completing her Master of Public Health (MPH).



Elena Blokhina, MD, PhD

Co-Investigator, Russia ARCH Cohort

Deputy Director, Valdman Institute of Pharmacology

First St. Petersburg Pavlov State Medical University, Russian Federation

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Elena Blokhina is the Deputy Director of the Valdman Institute of Pharmacology at First Pavlov State Medical University in St. Petersburg Russia; she is also an addiction psychiatrist at the Pavlov Outpatient Center. She has been coordinating and managing NIH-funded research activities at Pavlov since 2008. Her primary focus is with clinical trials studying new medications for alcoholism, opioid dependence, and behavioral interventions to reduce HIV risky behavior. She currently serves as the Site Coordinator on the NIAAA-funded St. PETER HIV trial; and the NIDA-funded LINC trial (Linking Russian Narcology & HIV Care to Enhance Treatment, Retention & Outcomes – Part II). She works closely with principal investigators to develop and implement clinical trials; supervises all intervention, assessment, and data entry staff; communicates with laboratories and clinical sites in Russia and coordinates the exchange of information with co-investigators in the US and Russia via weekly research meetings.



Jules Canfield, MPH

Program Manager, Administrative Core

Boston Medical Center

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Jules Canfield is a Program Manager and they have been providing support to URBAN ARCH through the Admin Core for over four years. They also manage the Research in Addiction Medicine Scholars Program, which aims to develop skills in addiction medicine research among physicians. Jules received their MPH from the Boston University School of Public Health in 2014. Jules has also served as a volunteer, intern, and on the Board of Directors at the Bisexual Resource Center (BRC).



Natalie Chichetto, PhD, MSW

*Postdoctoral Research Fellow
Vanderbilt University Medical Center*
natalie.chichetto@vumc.org



Natalie Chichetto is a 2nd year Postdoctoral Research Fellow at Vanderbilt University Medical Center mentored by Drs. Freiberg and Tindle. She is a formally trained social worker and epidemiologist in the areas of alcohol use and cardiovascular disease among high risk populations, with a focus on persons living with HIV (PLWH). Her primary focus as an epidemiologist is investigating the health implications of common behavioral syndemics, particularly concurrent unhealthy alcohol use, cigarette smoking, and depressive symptoms. Her primary career goal is to improve cardiovascular disease (CVD) and other non-AIDS related conditions associated with behavioral health conditions among PLWH. She is specifically interested in bridging the gap between mechanistic research and implementation science by focusing on biologically-informed pathways (e.g., the gut microbiome) for interventions to reduce inflammation, and by extension end organ disease (e.g., CVD) in those with syndemic behavioral conditions. She is a recipient of a K12 award (PI Freiberg V-SCHoLARS), where she will be utilizing VACS and ACME HIV data to investigate the longitudinal associations between concurrent unhealthy alcohol use, smoking, and depressive symptoms and CVD outcomes, characteristics of the gut microbiome and biomarkers of gut permeability, systemic inflammation, and coagulation.

Alexandra Chretien

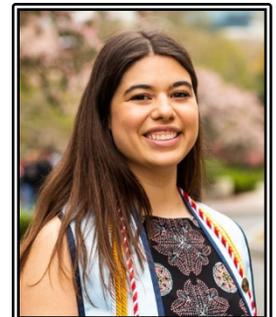
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Alexandra Chretien is a Research Study Assistant in the Boston ARCH 4F (Frailty, Functional impairment, Falls, and Fractures) Research Study, as part of URBAN ARCH. She has been contributing to research efforts since 2018 by aiding in recruitment, administering the research assessments, and assisting with various other administrative duties. Alexandra is also currently a student at Boston University School of Public Health where she is completing her Master in Public Health (MPH) with a certificate in Biostatistics and Epidemiology.

Olivia Ciolfi

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Olivia Ciolfi is a Research Study Assistant on Boston ARCH 4F (Frailty, Functional Impairment, Falls, and Fractures) as part of URBAN ARCH. She contributes to research efforts by aiding in recruitment, administering the research assessments, and assisting with various administrative duties. Olivia is also currently a student at Boston University School of Public Health where she is completing her Master in Public Health (MPH) with a certificate in Maternal and Child Health.

Robert Cook, MD, MPH

Professor of Epidemiology and Medicine

University of Florida, College of Public Health and Health Professions and College of Medicine

Director, Southern HIV & Alcohol Research Consortium (SHARC) and SHARC Center for Translational HIV Research

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Robert Cook is Professor of Epidemiology and Medicine, and the Director of the Southern HIV & Alcohol Research Consortium, supported by NIAAA. Dr. Cook leads several NIH-funded projects taking place in Florida, including both observational and intervention research related to alcohol and HIV. Dr. Cook is MPI of a T32 training program related to alcohol and HIV at the University of Florida, PI of a NIDA-funded project examining marijuana and HIV, leader of a Florida Stigma Working Group, and MPI on several projects examining connections between the gut microbiome, liver and systemic inflammation, and the brain. Specifically, he is MPI with Dr. Barve for the 2/2 ACME project studying the gut microbiome, alcohol and HIV in Florida, which is a companion project to the ACME project led by URBAN ARCH investigators in Russia. In 2019, Dr. Cook was appointed the Associate Director of the Consortium for Medical Marijuana Clinical Outcomes Research, which is funded by the state of Florida.

Peggy Doyle, PhD

Co-Investigator, Russia ARCH Cohort

Assistant Professor of Pathology and Laboratory Medicine

Larner College of Medicine

University of Vermont

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Peggy Doyle is an Assistant Professor of Pathology and Laboratory Medicine in the Larner College of Medicine at the University of Vermont. As part of the larger Laboratory for Clinical Biochemistry Research (LCBR), which serves as a repository and core lab for major population studies such as the Multi-Ethnic Study of Atherosclerosis (MESA), Cardiovascular Health Study (CHS), REasons for Geographic And Racial Differences in Stroke (REGARDS), Jackson Heart Study (JHS), and Veterans Aging Cohort Study Biomarker Cohort (VACS), she directs the cellular immunology lab. Her primary research interests are in the role of innate and adaptive immune cells in inflammation and how they affect disease initiation and progression. As a biochemist, she wants to go beyond simple associations and look at mechanisms that may affect cell levels, from circulating proteins (cytokines, chemokines, adipokines), to bacterial and viral infections, to circulating extracellular nucleic acids and finally, modifiable effects such as diet, exercise, sleep, and stress.

Nneka Emenyonu, DrPH, MPH

Project Director, Uganda ARCH Cohort

Infectious Diseases, San Francisco General Hospital

University of California, San Francisco

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Nneka Emenyonu has been directing large longitudinal cohort studies in Uganda since 2004, including the BREATH Study (R01 AA018641), Uganda URBAN ARCH Uganda (ADEPT) Study (U01 AA020776), Uganda URBAN ARCH Uganda (ADEPTT) Study (U01 AA020776), and the DIPT Study (U01 AA026223). From 2004–2010, she lived in Mbarara, where she helped launch the UCSF-Mbarara University of Science and Technology research collaboration. She has a DrPH from UNC Chapel Hill, MPH from Johns Hopkins Bloomberg School of Public Health, and BA in Biology from Oberlin College. Besides public health and Africa, Nneka is passionate about her family, especially her two daughters: Osa (18 years) and Zara (4 years).

Emily Epstein, MPH

Research Programs Manager

Vanderbilt Center for Clinical Cardiovascular Outcomes Research and Trials Evaluation (V-CREATE)

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Emily Epstein, MPH is the Research Programs Manager of the Vanderbilt Center for Clinical Cardiovascular Outcomes Research and Trials Evaluation (V-CREATE) directed by Dr. Freiberg. She has worked with Dr. Freiberg to coordinate NIH-funded research activities focused on HIV and Cardiovascular Disease since 2016. She was the Project Coordinator for the NHLBI-funded Immune Function and the Risk of Cardiovascular Disease Among HIV Infected and Uninfected Veterans study. She now serves as the administrative director of V-CREATE and works closely with principal investigators to prepare grant proposals, implement research studies, and facilitate collaborative research projects including the URBAN ARCH, ACME HIV, and TMAO studies as well as the Vanderbilt Scholars in HIV and Heart, Lung, Blood, and Sleep Research (V-SCHOLARS) K12 training program.

Simone Gill, PhD, OT, OTR

Co-Investigator, Boston ARCH Cohort

Associate Professor

Boston University School of Medicine

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Simone Gill is the Director of the Motor Development Laboratory, and an Associate Professor at the Boston University School of Medicine. Dr. Gill investigates how individuals' bodies and environmental demands influence walking and motor functioning across the lifespan. She uses a variety of methods to examine how children and adults modify their walking patterns to navigate through the environment. Dr. Gill will provide her falls expertise to help in developing a pilot falls prevention intervention as part of the Boston ARCH 4F study.

Natalia Gnatienco, MPH

Associate Director of Research Operations

Administrative Core and Russia ARCH Cohort

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Natalia Gnatienco is an Associate Director of Research Operations in the Clinical Addiction Research and Education (CARE) Unit. In addition to taking over as the Administrative Director of the URBAN ARCH Admin Core from Carly Briden, Natalia also oversees Dr. Samet's portfolio of Russia studies that address HIV and substance use, serves as the Core Manager for the Substance Use Research Core of the Providence/Boston Center for AIDS Research, and works with internal and external investigators to coordinate NIH grant applications with a focus on studies with international components. Natalia has been part of the CARE Unit since 2011.

Timothy Heeren, PhD

Biostatistician, Biostatistics and Data Management Core

Professor of Biostatistics

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Timothy Heeren is a Professor of Biostatistics who earned his PhD in Mathematics (Statistics) from Boston University, and has been on the faculty of the School of Public Health since 1981. Dr. Heeren has developed and taught both introductory and advanced applied biostatistics methods courses at the School of Public Health. Currently, he alternates between teaching the core biostatistics course and the more advanced Statistical Methods in Epidemiology. Dr. Heeren's research interests are in applied biostatistics, observational studies, behavioral trials, regression models, and complex survey design. His current applied research includes serving as biostatistician on three longitudinal cohort studies examining: the consequences of in-utero cocaine and other substance exposure on child development through the early adulthood, cognitive functioning of extremely low gestational age infants at age 10, and how factors measured at birth predicted age 10 functioning, and the health consequences of care giving for the elderly. Dr. Heeren is the senior biostatistician for the Boston ARCH Cohort.

Karen Jacobson, MD, MPH

Co-Investigator, Uganda ARCH Cohort

Associate Professor of Medicine

Boston University School of Medicine

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Karen Jacobson is an Associate Professor of Medicine in the Section of Infectious Diseases, Boston University School of Medicine, with a secondary appointment in the Department of Epidemiology, Boston University School of Public Health. Her research focuses on the epidemiology of tuberculosis (TB) and drug resistant TB, including identification of social, biological, and economic determinants of and risk factors for drug resistance and approaches for improving TB outcomes in resource-limited settings. She has established a highly productive collaboration with researchers at Stellenbosch University in Cape Town, South Africa, investigating the drivers of drug resistance in the Western Cape Province of South Africa (both cohort and spatial epi approaches) and working to identify potentially modifiable factors. Dr. Jacobson is the PI of a R01 prospectively investigating the causal mechanisms underlying the deleterious effects of problem alcohol use on TB treatment outcomes, including effects independent of adherence and specifically impact on TB drug levels, and of a second R01 investigating the role of smoked illicit drug use in TB transmission.

September Johnson

Research Assistant, Boston ARCH Cohort

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September Johnson is a Research Assistant in the Boston ARCH 4F (Frailty, Functional impairment, Falls, and Fractures) Study as part of URBAN ARCH. She has been supporting the team and contributing to research efforts since May of 2019. September is currently a student at Boston University School of Public Health where she is completing her Master's in Public Health (MPH) with a certificate in Community Assessment, Program Design, Implementation and Evaluation. September is also a Research Assistant on the Alcohol Disorder hOsPital Treatment (ADOPT) Study, a comparative effectiveness RCT of injectable vs. oral naltrexone in hospitalized adults with alcohol use disorder. Previously, September worked as a Project Coordinator at the University at Albany where she managed numerous sensitive and multi-funded health projects on the national and global level.

Theresa W. Kim, MD

Co-Investigator, Boston ARCH Cohort

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Theresa W. Kim is a general internist in the Clinical Addiction Research Education (CARE) program at Boston Medical Center. She is also a member of the Boston Health Care for the Homeless Program HIV team providing shelter-based primary and HIV care. She is unique among faculty in the BMC Section of General Internal Medicine with NIH-funded addiction research training, board certification in internal and addiction medicine, and credentialing by the American Academy of HIV. As site-PI or co-Investigator, she has conducted NIAAA, NIDA, SAMHSA, and VA-funded studies of models of integrated addiction care in primary care settings. She has also received NIH funding for her research on alcohol and opioids on poor bone health. Recently, she led the effort to receive funding to examine repetitive opioid overdose, cognitive impairment, and the moderating role of lifetime alcohol consumption in the 4F cohort.

Sarah Koberna, MA

Research Coordinator, Administrative Core

Boston Medical Center

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Sarah Koberna is a Research Coordinator in the Clinical Addiction Research and Education (CARE) Unit at Boston Medical Center. She has worked closely with Natalia Gnatienco to provide project and administrative support within the URBAN ARCH Administrative Core since September 2019. Prior to joining the Boston Medical Center, Sarah received a Master of Arts in Psychological and Brain Sciences from Boston University, and a Bachelor of Science from the Pennsylvania State University.

Evgeny Krupitsky, MD, PhD, DMSci

Co-Investigator for Russia ARCH Cohort

Chief, Lab of Clinical Pharmacology of Addictions, Pavlov State Medical University

Chief, Department of Addictions, St. Petersburg Bekhterev Psychoneurological Research Institute,

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Evgeny Krupitsky is a Vice-Director for Research and a Chief of the Department of Addictions at St. Petersburg Bekhterev Research Psychoneurological Institute and a Chief of the Laboratory of Clinical Psychopharmacology of Addictions at St. Petersburg State Pavlov Medical University, Russia. Since 2006, he also holds a position of Adjunct Professor of Psychiatry at the Department of Psychiatry, University of Pennsylvania. Dr. Krupitsky received several national and international awards including European College of Neuropsychopharmacology Fellowship Award (1997), Heffter Research Institute Award for Outstanding Research in Hallucinogens (2000), Award of the Government of Russian Federation for Outstanding Research in Medicine (2005), and National Institute Drug Abuse (NIDA) Award for Excellence in International Leadership. Dr. Krupitsky published many papers in international psychiatric journals and is also an author of several chapters in the international manuals and two books on the treatment of alcoholism and addictions published in Russian.

Benjamin P. Linas, MD, MPH

Co-Investigator, Uganda ARCH Cohort

Assistant Professor of Medicine and Epidemiology, Boston University School of Medicine

Director, HIV Epidemiology and Outcomes Research Unit, Section of Infectious Diseases

Boston Medical Center

benjamin.linas@bmc.org



Ben Linas is a physician scientist dedicated to improving the health of vulnerable persons living with HIV and HCV infections. He is also an HIV and HCV provider at the Boston Medical Center infectious diseases practice, where he provides primary care and sub-specialty management of HIV, HCV, and HIV/HCV co-infected patients. His research investigates the comparative- and cost-effectiveness of interventions to identify and treat HIV and HCV. He employs methods of simulation modeling, clinical epidemiology, and clinical economics with the aim of maximizing the benefits of evolving therapies in the “real-world,” where diagnostics and therapy are rapidly evolving, resources are constrained, and the best methods for managing infected individuals are not certain.

Dmitry Lioznov, MD, PhD

Co-Investigator, Russia ARCH Cohort

Acting Director, Smorodintsev Research Institute of Influenza, St. Petersburg, Russia

Head of Department of Infectious Diseases and Epidemiology, Pavlov First State Medical University, St.

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Dmitry Lioznov is the Acting Director, Smorodintsev Research Institute of Influenza, and Head of Department of Infectious Diseases and Epidemiology at Pavlov First State Medical University, St. Petersburg, Russia. He has been the Principal Investigator or Co-Investigator in numerous international projects supported by the NIH, NIH/Fogarty International Center, World AIDS Foundation, UNICEF, Ford Foundation, the AIDS Foundation East-West (AFEW), and the American Red Cross. He serves on the editorial boards of three infectious disease journals. His academic mission and research efforts focus on the interactions of HIV/AIDS, drug and alcohol use, and co-infections such as viral hepatitis, STIs, and tuberculosis. He is also involved in research in other areas of infectious diseases: herpes virus infection, food-borne infections, and respiratory infections including in non-HIV immunocompromised patients.

Sara Lodi, MSc, PhD

Biostatistician, Biostatistics and Data Management Core

Assistant Professor of Biostatistics

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Sara Lodi is an Assistant Professor of Biostatistics at the Boston University School of Public Health. She obtained her PhD in Medical Statistics at the London School of Hygiene and Tropical Medicine, UK in 2009. Her research focuses on clinical epidemiology and comparative effectiveness research using routinely collected health data, particularly in the area of HIV.

Methodologically, she focuses on statistical techniques for causal inference to estimate effects of interventions along the HIV continuum of care. She has published many articles on behalf of large international collaborations of HIV cohorts such as CASCADE, COHERE, and the HIV-CAUSAL Collaboration.

Karsten Lunze, MD, MPH, DrPH

Assistant Professor of Medicine

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Karsten Lunze, Assistant Professor at Boston University and Director of Global Health in the section of GIM at Boston Medical Center, conducts research globally on individual and structural risk environments of people with addictions and other HIV key populations. He leads the CARE Unit's summer student research program and is co-director of the Substance Use Research Core of the Providence/Boston Center for AIDS Research (CFAR). His NIDA K99 and CFAR Developmental projects in Eastern Europe have explored stigma related to substance use, HIV, TB, and other conditions among marginalized populations. Karsten has worked on HIV risk projects and mixed-methods studies on health and human rights with Russia ARCH. Based on this work, the team is currently implementing and evaluating a stigma intervention for people who inject drugs in St. Petersburg (SCRIPT study).

Kara Magane, MS

Director of Research Operations, Boston ARCH Cohort

Boston University School of Public Health, Community Health Sciences Department

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Kara Magane is Director of Research Operations for Dr. Richard Saitz in the Department of Community Health Sciences at the Boston University School of Public Health. She works closely with Dr. Saitz and other investigators to implement and manage large NIH-funded studies, including clinical trials and longitudinal cohort studies, with a focus on improving healthcare and outcomes for individuals with substance use disorders. Kara supports the operations of the Boston ARCH research team by assisting with staff training, quality improvement initiatives, protocol development, and financial and grant management. Prior to joining Boston University, Kara was a Clinical Research Manager at Boston Children's Hospital where she managed multiple studies focused on substance use among adolescents and young adults.

Anna Martin

Research Assistant, Administrative Core

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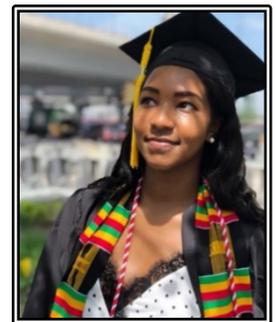
Anna Martin is a research assistant supporting URBAN ARCH as a member of the Admin Core. She received her BS in chemistry from The College of William and Mary in 2019. She previously worked as a research assistant in a biochemistry lab at William and Mary studying therapeutic applications of unnatural amino acids, and is excited to be moving away from the laboratory research sphere and into the clinical and public health research sphere.

Tiana Mason

Research Study Assistant, Boston ARCH Cohort

Boston University School of Public Health, Community Health Sciences Department

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Tiana Mason has recently joined the School of Public Health as a Research Study Assistant in Boston ARCH 4F (Frailty, Functional impairment, Falls, and Fractures) as part of URBAN ARCH. She received her BS in behavioral neuroscience from Northeastern University in 2017. Previously, Tiana worked as a mental health associate at Arbour Psychiatric hospital where she was assigned to the dual diagnosis unit to work with patients receiving care for acute mental illnesses comorbid with substance use.

Winnie Muyindike, MBChB, MMED

*Co-Investigator, Uganda ARCH Cohort
Director of Immune Suppression Syndrome Clinic
Mbarara University of Science and Technology, Republic of Uganda*
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Winnie Muyindike is an experienced physician and Lecturer of Medicine and has been the director of the Immune Suppression Syndrome (ISS) Clinic at the Mbarara University of Science and Technology (MUST) Regional Referral Hospital for the past five years. Her experiences as a physician and ISS clinic director have contributed to several NIH-funded research projects on which she has served as co-Investigator. In her capacity as Principal Investigator of the MUST subcontract for the R01 and U01 studies, BREATH and ADEPT respectively, she has made important contributions to study design, protocol development, and questionnaire development. Dr. Muyindike has been working with researchers from UCSF for many years and enjoys a collaborative and rewarding working relationship with Dr. Hahn.

Sarah Rossi

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Sarah Rossi is a Senior Research Assistant in the Clinical Addiction Research and Education (CARE) Unit at Boston Medical Center. She has been assisting with NIH-funded research activities focused on HIV and substance use in St. Petersburg, Russia since 2018. Sarah is also currently a student at Boston University School of Public Health where she is completing an MPH.

Kaku So-Armah, PhD

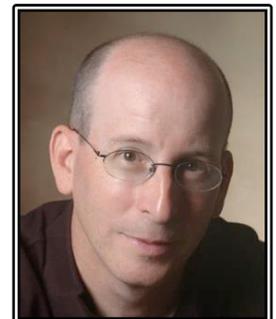
*Assistant Professor
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Kaku So-Armah is an Assistant Professor at the Boston University School of Medicine. His training is in epidemiology and his doctoral research focused on the role of co-morbid diseases and immunologic alterations in HIV-related cardiovascular disease (CVD) risk. He is currently studying the intersection of liver injury and CVD among HIV infected and uninfected people thanks to a K01 career development grant from the National Heart Lung and Blood Institute (NHLBI). Cohorts he works with include URBAN ARCH and the Veterans Aging Cohort Study (VACS). His long-term goal is to translate our growing understanding of the mechanisms of excess HIV-related CVD risk into effective, sustainable CVD risk reduction strategies for HIV populations in resource-limited settings.

Michael Stein, MD

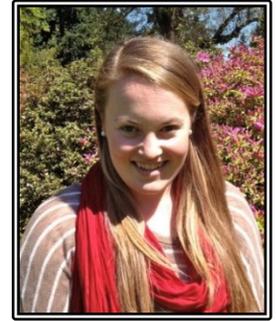
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Michael Stein is a Professor and Chair of the Department of Health Law, Policy, & Management at Boston University School of Public Health. He is also a physician and health services researcher. Over the past two decades, Dr. Stein has worked at the intersection of behavioral medicine and primary care. His outcomes research has moved between substance use disorders and HIV/AIDS, sleep and pain, mental health disorders, and the determinants of risk-taking, and he has published 375 scientific journal articles. Dr. Stein graduated from Harvard College and received his medical degree from Columbia College of Physicians & Surgeons. After medical residency at New England Medical Center, he completed a National Research Service Award Fellowship at Brown University.

Elsa Sweek, MS

*Project Manager, Boston ARCH Cohort
Department of Community Health Sciences
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Elsa Sweek is a Research Project Manager in the Department of Community Health Sciences at the Boston University School of Public Health. She joined Dr. Saitz's research team last summer, and comes from Massachusetts General Hospital where she coordinated multiple NIH-funded studies related to mental health, stigma, and substance use among people living with HIV. Elsa is the Research Project Manager for the Boston ARCH Cohort and the Alcohol Disorder hOsPital Treatment (ADOPT) Study, a comparative effectiveness RCT of injectable vs. oral naltrexone in hospitalized adults with alcohol use disorder.

Ve Truong

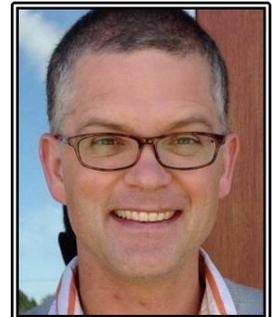
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Ve Truong is a Project Manager in the CARE Unit at Boston Medical Center. She manages a large international clinical trial in St. Petersburg, Russia (LINC-II) and an immersion training program for chief residents and fellows (CRIT/FIT). She provides research support to Russia ARCH and has been a part of the team since 2016.

Alexander Y. Walley, MD, MSc

*Co-Investigator, Boston ARCH Cohort
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Alexander Y. Walley is an Associate Professor of Medicine at Boston University School of Medicine and a general internist and addiction medicine specialist at Boston Medical Center. He is the director of the Grayken Addiction Medicine Fellowship program, which trains addiction medicine specialist physicians. He founded the Inpatient Addiction Consult Service in 2015. He does clinical and research-related work on the medical complications of substance use, specifically HIV and overdose. He is the medical director for the Massachusetts Department of Public Health's Opioid Overdose Prevention Pilot Program.

Michael Winter, MPH

*Statistical Programming Manager, Biostatistics and Data Management Core
Associate Director, Statistical Programming, BUSPH Data Coordinating Center
Boston University School of Public Health*
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Michael Winter is the Associate Director of Statistical Programming of the Data Coordinating Center at the Boston University School of Public Health, and he has over 25 years of experience in data management, statistical programming, and statistical analysis in the area of public health research. In addition, he was a senior statistical analyst in the Data Management and Statistics Core of the NIAAA funded Youth Alcohol Prevention Center at the Boston University School of Public Health from 2004–2006, and Associate Director of the Core from 2006–2010. Mr. Winter has a long history of collaborating as a statistical analyst or data manager with many of the investigators of the URBAN ARCH Consortium.

Tatiana Yaroslavtseva, MD

Site Project Manager, Russia ARCH Cohort

Scientific Secretary, Valdman Institute of Pharmacology, Russian Federation

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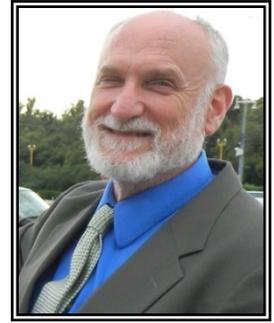


Tatiana Yaroslavtseva has held the position of Scientific Secretary at Valdman Institute of Pharmacology, St. Petersburg Pavlov State Medical University, Russia since 2011. She gained clinician experience in the treatment of patients with drug and alcohol dependence when she was working at the Saint-Petersburg City Addiction Hospital, Intensive Care Department for five years as an addiction psychiatrist. She participated in four collaborative studies with Boston University as a researcher and coordinator for “Alcohol Research Collaboration on HIV/AIDS: Russia Cohort”. Now she is a project coordinator for the current study "Studying Partial agonists for Ethanol and Tobacco Elimination in Russians with HIV (St PETER HIV)" and “Effect of Opioid Use Disorder on HIV Latent Reservoirs and Immune Dysfunction Assessed by Single-cell Transcriptomics (HIV Latency).”

National Institute on Alcohol Abuse and Alcoholism (NIAAA) Scientific Collaborator

Kendall Bryant, PhD

*Director, HIV/AIDS Research, National Institute on Alcohol Abuse and Alcoholism
Scientific Collaborator, Consortiums for HIV/AIDS and Alcohol Research Translation (CHAART)*
kbryant@mail.nih.gov



Kendall Bryant is currently the National Institute on Alcohol Abuse and Alcoholism (NIAAA) Director for Alcohol and HIV/AIDS Research and the Scientific Collaborator for the Consortiums for HIV/AIDS and Alcohol Research Translation (CHAART), within the NIAAA. He coordinates a comprehensive behavioral and biomedical research plan in collaboration with the NIAAA divisions, teams, and individual staff members and with NIH representatives of other institutes and through the Office of AIDS Research. He has contributed to a wide range of publications, reports, and strategic plans on the role of alcohol misuse in HIV infection and treatment, including those by the NIH AIDS Strategic Plan, the AIDS National Plan, and in the Surgeon General's Report. His current research focuses on development and testing of interventions in complex medical decision frameworks for treating patients with comorbid disease. In the past, he was also the Program Director at NIAAA for Psychological and Behavioral Research including Brief Screening and Intervention Research, Behavioral Genetics, and Longitudinal Methodological Research. He has published and edited volumes of research and provided multiple Requests for Applications (RFA, PA) that stress the development of theory-driven preventive interventions delivered to universal, selective, and targeted populations, reflecting the application of new methods in studying the efficacy, effectiveness, and diffusion of existing alcohol and HIV interventions.

URBAN ARCH K Grants Awarded

September 2013 – March 2020

Vanderbilt SCHolars in HIV and Heart, Lung, Blood, and Sleep ReSearch (V-SCHoLARS, K12)

Alcohol-Associated Syndemic and Microbiome Evaluation in Persons Living with HIV (Chichetto)

K12HL143956

Vanderbilt University Medical Center

8/15/18-6/30/23

Primary Mentor: Freiberg

The objective of this K12 is to train and mentor the next generation of HIV HLBS researchers with expertise in domains ranging from basic science to large population studies. As one of the supported scholars, Dr. Chichetto will investigate whether the alcohol-associated syndemic contributes to CVD and GI dysbiosis in people with HIV.

Engaging Young People who Inject Drugs into HCV and HIV Care (Assoumou)

K23DA044085

Boston Medical Center

5/1/18-4/30/23

Primary Mentor: Samet

This K23 will use the ADAPT-ITT framework to modify strengths-based case management (SBCM), an evidence-based linkage to care intervention, to address the needs of PWID aged 18 to 30 tested for HCV and HIV at a detoxification center.

Implementing Pre-Exposure Prophylaxis for HIV Prevention among People Who Inject Drugs (Bazzi)

K01DA043412

Boston University School of Public Health

4/1/17-3/31/22

Primary Mentors: Saitz & Drainoni

The objectives of this K01 are to 1) identify the modifiable determinants of PrEP access and utilization among HIV-uninfected PWID and key informants, and 2) develop a manualized intervention to improve PrEP uptake and adherence among PWID attending a community-based syringe exchange program.

Novel Mechanisms Driving Excess Atherosclerotic Cardiovascular Disease Risk in the Context of HIV: The Role of Liver Injury (So-Armah)

K01HL134147

Boston Medical Center

8/01/16-7/31/21

Primary Mentor: Samet

This K01 seeks to understand whether the excess risk for heart disease is caused by the high levels of liver injury often seen in HIV. Identifying the role that liver injury plays may have important implications for the ability to predict who is at increased risk for developing heart disease and finding effective ways to reduce this risk.

Stigma, Risk Behaviors and Health Care Among HIV-Infected Russian People Who Inject Drugs (Lunze)

K99DA041245

Boston Medical Center

6/01/16-5/31/18

Primary Mentor: Samet

In this pilot study, SCRIPT (Stigma Coping to Reduce HIV risks and Improve substance use Prevention and Treatment) data was examined to determine factors affecting double stigma and its role in substance use and health care utilization among HIV-infected PWID in Russia.

Alcohol Epidemiology and Pilot Intervention to Reduce Alcohol, IPV and HIV in Women in Uganda (Wagman)

K01AA024068

University of California Los Angeles

8/20/15-7/31/20

Primary Mentor: Hahn

The purpose of this career development award is to research women with co-morbid alcohol use disorders and intimate partner violence (IPV) victimization, at risk for acquiring HIV (or already infected), and pilot test an HIV clinic-based alcohol and IPV reduction intervention.

Training in Research Program on Alcohol Use by Persons-with-or-at-Risk for HIV (Hahn)

K24AA022586

University of California San Francisco

9/15/13-8/31/19

The objective of this K24 was to mentor investigators from University of California San Francisco (UCSF) and Uganda in patient-oriented alcohol/HIV research.

2019 URBAN ARCH Conference Presentations

Sanyu N, Getahun M, Emenyonu NI, Fatch R, Leddy A, Woolf-King S, Muyindike WR, Camlin CS, Hahn JA. Adapting an evidence-based brief alcohol intervention to reduce alcohol use among HIV-positive men and women in southwestern Uganda. International Conference on AIDS and STIs in Africa; Kigali, Rwanda.

So-Armah K, Doyle M, Tracy R, McDonnell W, Koethe J, Olson N, Marconi V, Hulgan T, Justice A, Freiberg M. Association of Alcohol and Immunity (T-Cell Subtypes B-Cells and Monocytes) Among HIV Infected and Uninfected People. Part of the RSA Symposium: Saitz R, Bryant K, Barve S, So-Armah K, Hahn J, Freiberg M. HIV, Alcohol and Comorbidity: From the microbiome and immunity to clinical outcomes. Research Society on Alcoholism; Minneapolis, MN.

Klepp T, Heeren TC, Winter MR, Lloyd-Travaglini CA, Magane K, Romero Rodriguez E, Kim TW, Walley AY, Saitz R. Cannabis Use in HIV Patients with Chronic Pain. Boston University Medical School, Medical Student Symposium; Boston, MA.

Kim S, Erlandson KM, Lloyd-Travaglini C, Meli S, Walley AY, Heeren TC, Saitz R. Falls in people living with HIV infection and alcohol and other drug use. Part of the RSA Symposium: Saitz R, Bryant K, Barve S, So-Armah K, Hahn J, Freiberg M. HIV, Alcohol and Comorbidity: From the microbiome and immunity to clinical outcomes. Research Society on Alcoholism; Minneapolis, MN.

Kim S, Erlandson KM, Lloyd-Travaglini C, Meli S, Walley AY, Heeren TC, Saitz R. Falls in people living with HIV infection and alcohol and other drug use. HIV and Aging: From Mitochondria to the Metropolis conference; Decatur, GA.

Barve, S. Metagenomic Analyses of the Gut-Microbial Dysbiosis among HIV Infected Heavy Drinkers. Part of the RSA Symposium: Saitz R, Bryant K, Barve S, So-Armah K, Hahn J, Freiberg M. HIV, Alcohol and Comorbidity: From the microbiome and immunity to clinical outcomes. Research Society on Alcoholism; Minneapolis, MN.

R Singhal, R Smith, K Stocke, S Ghare, M Vadhanam, D Lioznov, E Krupitsky, K Armah, N Gnatienco, J Samet, K Bryant, C McClain, M Freiberg, S Barve. Metagenomic analyses reveal a significant enrichment of “pro-inflammatory” Enterobacteriaceae associated with very heavy alcohol use and HIV infection. Research Society on Alcoholism; Minneapolis, MN.

Mokhtar R, Kim T, Winter M, Heeren T, Walley A, Holick M, Saitz R. No effect of alcohol use on bone microarchitecture of the distal radius among HIV infected adults. ENDO; New Orleans, LA.

Lodi S, Freiberg M, Gnatienco N, Blokhina E, Yaroslavtseva T, Krupitsky E, Samet J, Cheng D. Per-protocol analysis of the ZINC trial using causal interference methods. International Workshop on HIV and Hepatitis Observational Databases; Athens, Greece.

Tsui J, Bendiks S, Cheng DM, Blokhina E, Vetrova M, Verbitskaya E, Gnatienco N, Bryant K, Krupitsky E, Samet JH. Pilot study of tolerability and safety of opioid receptor antagonists as novel therapies for pain among HIV-positive Russians with chronic pain and prior heavy drinking. College on Problems of Drug Dependence; San Antonio, TX.

Schoenberger SF, Kiriazova T, Makarenko O, Bendiks S, Flanigan T, Gillani FS, Lunze K. Police abuse, ART adherence, and harm reduction among PWID living with HIV in Ukraine. International AIDS Society; Mexico City, Mexico.

Bertholet N, Winter M, Heeren T, Walley A, Saitz R. Polysubstance use patterns and HIV disease severity among those with substance use disorder: Latent class analysis. College on Problems of Drug Dependence; San Antonio, TX. Annual Conference of the Association for Multidisciplinary Education and Research in Substance Use and Addiction; Boston, MA. Annual Conference of the International Network on Brief Interventions for Alcohol & Other Drugs; Luebeck, Germany.

Kekibiina A, Adong J, Fatch R, Emenyonu NI, Marson K, Beesiga B, Lodi S, Muyindike WR, Kwarisiima D, Chamie G, McDonnell M, Hahn JA. Post-traumatic stress disorder among HIV-positive heavy alcohol drinkers in southwestern Uganda. International Conference on AIDS and STIs in Africa; Kigali, Rwanda.

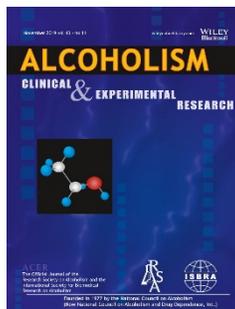
Hahn, J. Prevalence of Elevated Transaminases and its Relationship with Drinking and BMI in People Living with HIV on Anti-Retroviral Therapy in Uganda. Part of the RSA Symposium: Saitz R, Bryant K, Barve S, So-Armah K, Hahn J, Freiberg M. HIV, Alcohol and Comorbidity: From the microbiome and immunity to clinical outcomes. Research Society on Alcoholism; Minneapolis, MN.

Ngabirano C, Fatch R, Muyindike WR, Emenyonu NI, Adong J, Cheng D, Hahn JA. The relationship between social support and heavy alcohol use among HIV-infected drinkers in southwestern Uganda. International Conference on AIDS and STIs in Africa, Kigali, Rwanda.

Rawlins-Pilgrim S, Winter M, Heeren T, Walley A, Kim T, Kim S, Saitz R. Substance use and quality of life in an urban cohort of people living with HIV and substance dependence. College on Problems of Drug Dependence; San Antonio, TX.

2019 URBAN ARCH Papers

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Adong J, Fatch R, Emenyonu NI, Cheng DM, Muyindike WR, Ngabirano C, Kekibiina A, Woolf-King SE, Samet JH, Hahn JA. **Social desirability bias impacts self-reported alcohol use among persons with HIV in Uganda.** *Alcohol Clin Exp Res.* 2019;43(2).

BACKGROUND: Self-report is widely used to assess alcohol use in research and clinical practice, but may be subject to social desirability bias. We aimed to determine if social desirability impacts self-reported alcohol use.

METHODS: Among 751 human immunodeficiency virus (HIV)-infected patients from a clinic in southwestern Uganda, we measured social desirability using the Marlowe-Crowne Social Desirability Scale (SDS) Short Form C, self-reported alcohol use (prior 3 months) Alcohol Use Disorders Identification Test-Consumption (AUDIT-

C), and phosphatidylethanol (PEth), a biomarker of prior 3 weeks' drinking. We conducted multiple regression analyses to assess the relationship between SDS score (low, medium, and high levels) and (i) any self-reported recent alcohol use, among those who were PEth-positive (≥ 8 ng/ml), and (ii) continuous AUDIT-C score, among those reporting any recent alcohol use. We controlled for PEth level, age, gender, education, economic assets, marital status, religion, spirituality/religiosity, social support, and study cohort.

RESULTS: Of 751 participants, 59% were women; the median age was 31 years (interquartile range [IQR]: 26 to 39). Median SDS score was 9 (IQR: 4 to 10). Two-thirds (62%) self-reported any recent alcohol use; median AUDIT-C was 1 (IQR: 0 to 4). Among those who were PEth-positive (57%), 13% reported no recent alcohol use. Those with the highest SDS tertile had decreased odds of reporting any recent alcohol use compared to the lowest tertile, but the association did not reach statistical significance in multivariable analyses (adjusted odds ratio 0.55 [95% confidence interval (CI): 0.25, 1.23]). Among participants self-reporting recent alcohol use, SDS level was negatively associated with AUDIT-C scores (adjusted β : -0.70 [95% CI: -1.19, -0.21] for medium vs. low SDS and -1.42 [95% CI: -2.05, -0.78] for high vs. low SDS).

CONCLUSIONS: While use of objective measures (e.g., alcohol biomarkers) is desirable for measuring alcohol use, SDS scores may be used to adjust self-reported drinking levels by participants' level of social desirability in HIV research studies.



Barocas JA, So-Armah K, Cheng DM, Lioznov D, Baum M, Gallagher K, Fuster D, Gnatienco N, Krupitsky E, Freiberg MS, Samet JH. **Zinc deficiency and advanced liver fibrosis among HIV and hepatitis C co-infected anti-retroviral naïve persons with alcohol use in Russia.** *PLoS One.* 2019; 14(6):e0218852. PMID: PMC6597160.

BACKGROUND AND AIMS: Liver disease in people living with HIV co-infected with hepatitis C virus is a source of morbidity and mortality in Russia. HIV accelerates liver fibrosis in the setting of HCV co-infection and alcohol use. Zinc deficiency is common among people living with HIV and may be a factor that facilitates the underlying mechanisms of liver fibrosis. We investigated the association between zinc deficiency and advanced liver fibrosis in a cohort of HIV/HCV co-infected persons reporting heavy drinking in Russia.

METHODS: This is a secondary data analysis of baseline data from 204 anti-retroviral treatment naïve HIV/HCV co-infected Russians with heavy drinking that were recruited into a clinical trial of zinc supplementation. The primary outcome of interest in this cross-sectional study was advanced liver fibrosis. Zinc deficiency, the main independent variable, was defined as plasma zinc < 0.75 mg/L. Exploratory analyses were performed examining continuous zinc levels and fibrosis scores. Analyses were conducted using multivariable regression models adjusted for potential confounders.

RESULTS: The prevalence of advanced liver fibrosis was similar for those with zinc deficiency compared to those with normal zinc levels, (27.7% vs. 23.0%, respectively). We did not detect an association between zinc deficiency and advanced liver fibrosis in the adjusted regression model (aOR: 1.28, 95% CI: 0.62-2.61, $p = 0.51$) nor in exploratory analyses.

CONCLUSIONS: In this cohort of Russians with HIV/HCV co-infection, who are anti-retroviral treatment naïve and have heavy alcohol use, we did not detect an association between zinc deficiency or zinc levels and advanced liver fibrosis.

Blokhina E, Krupitsky EM, Cheng DM, Walley AY, Toussova O, Yaroslavtseva T, Gnatienco N, Bridden C, Forman L, Bendiks S, Samet JH. **Evolution of illicit opioid use among people with HIV infection in St Petersburg, Russia, in the period 2004-2015.** *HIV Medicine.* 2019;20(7):450-455.

OBJECTIVES: In the late 1990s, when the current Russian opioid epidemic began, illicit opioids used in Russia consisted almost exclusively of heroin. The type of opioids used has evolved in the early 21st Century. The objective of this study was to describe the evolution of illicit opioid use among people living with HIV (PLWH) reporting recent opioid use in St Petersburg, Russia.

METHODS: We examined baseline data from four research studies conducted in the period 2004-2015 that included PLWH who used opioids [Partnership to Reduce the Epidemic Via Engagement in Narcology Treatment (PREVENT; 2004-2005; n = 17), HIV Evolution in Russia-Mitigating Infection Transmission and Alcoholism in a Growing Epidemic (HERMITAGE; 2007-2010; n = 281), Linking Infectious and Narcology Care (LINC; 2013-2014; n = 119) and Russia Alcohol Research Collaboration on HIV/AIDS (Russia ARCH; 2012-2015; n = 121)] and reported recent use of heroin and other opioids.

RESULTS: Although these studies spanned more than a decade, the participants represented similar birth cohorts; the mean age was 24.5 years in 2004 and 33.3 years in 2014. The use of opioid types, however, evolved across cohorts, with the use of any illicit drug other than heroin increasing from 6% [95% confidence interval (CI) 0.002, 29%] in PREVENT (2004-2005) to 30% (95% CI 25, 36%) in HERMITAGE (2007-2010) to 70% (95% CI 61, 78%) in LINC (2013-2014) to 77% (95% CI 68, 84%) in ARCH (2012-2015). Any heroin use consistently decreased over the 10-year period in the cohorts, from 100% (95% CI 80, 100%) in 2004-2005 to 54% (95% CI 44, 63%) in 2012-2015.

CONCLUSIONS: Among PLWH who use opioids in St Petersburg, Russia, illicit use of opioids other than heroin appears to be more common than heroin use.



Thakrar K, Walley AY, Heeren TC, Winter MR, Ventura AS, Sullivan M, Drainoni M, Saitz R. **Medication for addiction treatment and acute care utilization in HIV-positive adults with substance use disorders.** *AIDS Care.* 2019 Nov 05; 1-5.

Medication for addiction treatment (MAT) could reduce acute care utilization in HIV-positive individuals with substance use disorders. The study objective was to determine if HIV-positive people with substance use disorders treated with MAT report less acute care utilization than those not receiving MAT. We assessed the association between MAT and acute care utilization among HIV-positive individuals with alcohol or opioid use disorder. Acute care utilization 6 months later was defined as any past 3-month self-reported (1) emergency department (ED) visit and (2) hospitalization. Of 153 participants, 88% had alcohol use disorder, 41% had opioid use disorder, and 48 (31%) were treated with MAT. Fifty-five (36%) participants had an ED visit and 38 (25%) participants had a hospitalization. MAT was not associated with an ED visit (AOR 1.12, 95% CI 0.46-2.75) or hospitalization (AOR 1.09, 95% CI 0.39-3.04). MAT was not associated with acute care utilization. These results highlight the need to increase MAT prescribing in HIV-positive individuals with substance use disorders, and to address the many factors that influence acute care utilization.



Palfai TP, Taylor JL, Saitz R, Kratzer MPL, Otis JD, Bernstein JA. **Development of a tailored, telehealth intervention to address chronic pain and heavy drinking among people with HIV infection: integrating perspectives of patients in HIV care.** *Addict Sci Clin Pract.* 2019;14(1):35. PMID: PMC6714455.

BACKGROUND: Chronic pain and heavy drinking commonly co-occur and can influence the course of HIV. There have been no interventions designed to address both of these conditions among people living with HIV (PLWH), and none that have used telehealth methods. The purpose of this study was to better understand pain symptoms, patterns of alcohol use, treatment experiences, and technology use among PLWH in order to tailor a telehealth intervention that addresses these conditions.

SUBJECTS: Ten participants with moderate or greater chronic pain and heavy drinking were recruited from a cohort of patients engaged in HIV-care (Boston Alcohol Research Collaborative on HIV/AIDS Cohort) and from an integrated HIV/primary care clinic at a large urban hospital.

METHODS: One-on-one interviews were conducted with participants to understand experiences and treatment of HIV, chronic pain, and alcohol use. Participants' perceptions of the influence of alcohol on HIV and chronic pain were explored as was motivation to change drinking. Technology use and treatment preferences were examined in the final section of the interview. Interviews were recorded, transcribed and uploaded into NVivo® v12 software for analysis. A codebook was developed based on interviews followed by thematic analysis in which specific meanings were assigned to codes. Interviews were supplemented with Likert-response items to evaluate components of the proposed intervention.

RESULTS: A number of themes were identified that had implications for intervention tailoring including: resilience in coping with HIV; autonomy in health care decision-making; coping with pain, stress, and emotion; understanding treatment rationale; depression and social withdrawal; motives to drink and refrain from drinking; technology use and capacity; and preference for intervention structure and style. Ratings of intervention components indicated that participants viewed each of the proposed intervention content areas as "helpful" to "very helpful". Videoconferencing was viewed as an acceptable modality for intervention delivery.

CONCLUSIONS: Results helped specify treatment targets and provided information about how to enhance intervention delivery. The interviews supported the view that videoconferencing is an acceptable telehealth method of addressing chronic pain and heavy drinking among PLWH.



Samet JH, Blokhina E, Cheng DM, Walley AY, Lioznov D, Gnatienco N, Quinn EK, Briden C, Chaisson CE, Tousova O, Gifford AL, Raj A, Krupitsky E. **A strengths-based case management intervention to link HIV-positive people who inject drugs in Russia to HIV care.** *AIDS.* 2019; 33(9):1467-1476. PMID: PMC6635053.

OBJECTIVE: To determine whether the Linking Infectious and Narcology Care strengths-based case management intervention was more effective than usual care for linking people who inject drugs (PWID) to HIV care and improving HIV outcomes.

DESIGN: Two-armed randomized controlled trial.

SETTING: Participants recruited from a narcology hospital in St. Petersburg, Russia.

PARTICIPANTS: A total of 349 HIV-positive PWID not on antiretroviral therapy (ART).

INTERVENTION: Strengths-based case management over 6 months.

MAIN OUTCOME MEASURES: Primary outcomes were linkage to HIV care and improved CD4 cell count. We performed adjusted logistic and linear regression analyses controlling for past HIV care using the intention-to-treat approach.

RESULTS: Participants (N = 349) had the following baseline characteristics: 73% male, 12% any past ART use, and median values of 34.0 years of age and CD4 cell count 311 cells/ μ l. Within 6 months of enrollment 51% of the intervention group and 31% of controls linked to HIV care (adjusted odds ratio 2.34; 95% confidence interval: 1.49-3.67; $P < 0.001$). Mean CD4 cell count at 12 months was 343 and 354 cells/ μ l in the intervention and control groups, respectively (adjusted ratio of means 1.14; 95% confidence interval: 0.91, 1.42, $P = 0.25$).

CONCLUSION: The Linking Infectious and Narcology Care strengths-based case management intervention was more effective than usual care in linking Russian PWID to HIV care, but did not improve CD4 cell count, likely due to low overall ART initiation. Although case management can improve linkage to HIV care, specific approaches to initiate and adhere to ART are needed to improve clinical outcomes (e.g., increased CD4 cell count) in this population.

BACKGROUND: Biomarkers of monocyte activation (soluble CD14 [sCD14]), inflammation (interleukin-6 [IL-6]), and altered coagulation (D-dimer) are associated with increased mortality risk in people with HIV. The objective of the Russia Alcohol Research Collaboration on HIV/AIDS (ARCH) study was to evaluate the association between heavy alcohol use and inflammatory biomarkers over time.

METHODS: The study sought antiretroviral therapy naive participants with HIV (n = 350) and assessed them at baseline, 12 and 24 months. Linear mixed effects models were used to determine whether heavy drinking (self-report augmented by phosphatidylethanol [PEth], an alcohol biomarker) was longitudinally associated with IL-6, sCD14 and D-dimer adjusting for potential confounders (e.g., demographics, HIV factors, comorbid conditions).

RESULTS: Participants' baseline characteristics were as follows: 71% male; mean age of 34 years; 87% self-reported hepatitis C; and 86% current smokers. Mean log₁₀ (HIV RNA) was 4.3 copies/mL. Heavy alcohol use, based on National Institute of Alcohol Abuse and Alcoholism risky drinking criteria and PEth (versus non-heavy alcohol use) was associated with higher sCD14 (adjusted mean difference 125 ng/mL [95% CI: 42, 209]), IL-6 (ratio of means 1.35 [95% CI: 1.17, 1.55] pg/mL), and D-dimer (ratio of means 1.20 [95% CI: 1.06, 1.37] ug/mL) across the two-year follow-up.

CONCLUSION: Among HIV+ adults, current heavy alcohol use is associated with higher sCD14, IL-6 and D-dimer over time. Since these biomarkers are associated with mortality, interventions to mitigate effects of heavy drinking on these immune processes merit consideration.

BACKGROUND: The multifactorial mechanisms driving negative health outcomes among risky drinkers with HIV may include immunosenescence. Immunosenescence, aging of the immune system, may be accentuated in HIV and leads to poor outcomes. The liver regulates innate immunity and adaptive immune tolerance. HIV-infected people have high prevalence of liver-related comorbidities. We hypothesize that advanced liver fibrosis/cirrhosis is associated with alterations in T-cell subsets consistent with immunosenescence.

METHODS: ART-naïve people with HIV with a recent history of heavy drinking were recruited into a clinical trial of zinc supplementation. Flow cytometry was used to characterize T-cell subsets. The two primary dependent variables were CD8+ and CD4+ T-cells expressing CD28-CD57+ (senescent cell phenotype). Secondary dependent variables were CD8+ and CD4+ T-cells expressing CD45RO + CD45RA- (memory phenotype), CD45RO-CD45RA+ (naïve phenotype), and the naïve phenotype to memory phenotype T-cell ratio (lower ratios associated with immunosenescence). Advanced liver fibrosis/cirrhosis was defined as FIB-4 > 3.25, APRI ≥ 1.5, or Fibroscan measurement ≥ 10.5 kPa. Analyses were conducted using multiple linear regression adjusted for potential confounders.

RESULTS: Mean age was 34 years; 25% female; 88% hepatitis C. Those with advanced liver fibrosis/cirrhosis (N = 25) had higher HIV-1 RNA and more hepatitis C. Advanced liver fibrosis/cirrhosis was not significantly associated with primary or secondary outcomes in adjusted analyses.

CONCLUSIONS: Advanced liver fibrosis/cirrhosis was not significantly associated with these senescent T-cell phenotypes in this exploratory study of recent drinkers with HIV. Future studies should assess whether liver fibrosis among those with HIV viral suppression and more advanced, longstanding liver disease is associated with changes in these and other potentially senescent T-cell subsets.

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