# 2022 URBAN ARCH ANNUAL MEETING



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

Program Booklet May 10, 2022

## **Table of Contents**

3-4
5-9
10-16
17
18-19
20
21
22-23
24
25-26
<b>2</b> 7
28-29
30-31
32-43
44
45
46
47-48
49



#### 2022 URBAN ARCH Annual Meeting Tuesday, May 10<sup>th</sup>, 2022

The objectives of the 2022 URBAN ARCH Annual Meeting are to bring together URBAN ARCH teams and collaborators to do the following:

- Discuss the findings, accomplishments, legacy, and continuation of the URBAN ARCH Consortium
- Introduce the International URBAN ARCH Center and other 2<sup>nd</sup> generation URBAN ARCH P01 Centers
- Examine collaboration opportunities across HIV/alcohol P01 Centers

Discussion of collaborative opportunities

1:10 - 1:55

- Engage trainees in HIV and alcohol research domestically and internationally
- Update the Program Advisory Committee and receive feedback on progress and challenges of the International URBAN ARCH Center

#### **JOIN VIA ZOOM**

8:30 - 8:35	Welcome, introductions, and orientation to the day (Jeffrey Samet)
8:35 – 8:45	A tribute to Dr. Rich Saitz (opportunity for attendees to share)
8:45 – 9:00	NIAAA HIV/alcohol priorities (Kendall Bryant)
9:00 – 10:45	URBAN ARCH Consortium – What We Learned and What We Still Can Learn
9:35 –	9:35 Uganda ARCH 10:10 Russia ARCH - 10:45 Boston ARCH
10:45 – 11:00	Break
11:00 – 11:45	International URBAN ARCH Center Mission and Overview
11:15	<ul> <li>- 11:15 Theme, Organization, Cores, Training and Mentoring (Jeffrey Samet &amp; Debbie Cheng)</li> <li>- 11:30 TRAC study (Judy Hahn)</li> <li>- 11:45 SPIRIT study (Kaku So-Armah)</li> </ul>
11:45 – 12:30	Break
12:30 – 1:10	2nd Generation URBAN ARCH P01 Centers Overview and Trainee Opportunities
	– 12:50 ARCHER (Michael Stein) – 1:10 META HIV CVD (Matthew Freiberg)

- 2:00 2:45 Early Career Investigator Oral/Poster Abstract Presentations
  - 2:00 2:15 (Choose between breakout room A or B)
  - A. Alcohol use is associated with increased Pre-exposure Prophylaxis (PrEP) continuation and adherence among pregnant and post-partum women in South Africa (*Amanda Miller*)
  - B. ART suppressed HIV patients with opioid use disorder show a block in latency reversal (*Binita Basukala*)
  - 2:15 2:30 (Choose between breakout room A or B)
  - A. The effect of heavy alcohol consumption on plasma TMAO levels: A repeated cross-sectional study (Samuel O Mensah)
  - B. The prevalence and correlates of alcohol use and alcohol use disorders among young people (15 24 years) and adults in Eswatini, Malawi and Zambia (*Zethu Msibi*)
  - 2:30 2:45 (Choose between breakout room A or B)
  - A. Effect of alcohol consumption on CD4 recovery after antiretroviral therapy initiation (Angela McLaughlin)
  - B. Associations between alcohol use and antiretroviral therapy uptake among people living with HIV in rural Uganda (*Adriane Wynn*)
- 2:45 Adjourn/Transition to Closed Meeting for International URBAN ARCH Center and Program Advisory Committee



#### **Early Career Investigator Oral/Poster Abstract Presentations**



Alcohol use is associated with increased Pre-exposure Prophylaxis (PrEP) continuation and adherence among pregnant and post-partum women in South Africa

#### Presented by Amanda Miller, PhD

Department of Epidemiology, Fielding School of Public Health, University of California, Los Angeles, CA, USA

**Background:** South African (SA) women experience exceedingly high levels of alcohol use and incident HIV infection prior to and during pregnancy and postpartum periods, underscoring the need to address these issues in this population. When used consistently, oral pre-exposure prophylaxis (PrEP) is highly effective at reducing risk of HIV acquisition. There is evidence that alcohol use may be a barrier to optimal PrEP outcomes, but this relationship has not been explored among pregnant and breast-feeding women at high risk of HIV infection. To characterize the relationship between alcohol use and PrEP continuation and adherence in this population, we analyzed data from a prospective observational cohort of 1200 HIV-negative pregnant women enrolled at first antenatal care visit and followed through 12 months postpartum in Cape Town, SA.

Methods: We examined associations between report of any and hazardous alcohol use (measured using the AUDIT-C (cutoff of ≥3)) in the past year prior to pregnancy and PrEP continuation (ongoing receipt of PrEP prescription at 3 months) and adherence at 3-month follow-up using both self-reported (missing <2 doses in past 7 days) and biomarker-confirmed (presence of any tenofovir in blood) adherence measures. The analytic sample comprised of pregnant women who initiated PrEP at baseline and had not been censored at 3-month follow-up (n=943).

**Results:** Median participant baseline age was 26 years [IQR 22-31]; median gestation age was 22 weeks [IQR 15-31]. At 3-month follow-up, 41% were still pregnant. After adjusting for age, education, residence and current relationship, hazardous alcohol use was associated with increased odds of continuing PrEP (aOR 1.55, 95% CI: 1.17-2.06) and self-reported (aOR 1.41, 95% CI: 1.07, 1.86) and biomarker-confirmed (aOR 1.36, 95% CI: 0.99-1.88) adherence. The same trend was observed when looking at associations between any alcohol use and PrEP continuation and adherence. **Conclusions:** While existing literature suggests alcohol use can serve as a barrier to PrEP care and adherence, among pregnant and postpartum women in SA who initiated PrEP, recent alcohol use and hazardous drinking were associated with higher odds of PrEP continuation and adherence. These findings suggest PrEP is an acceptable HIV prevention strategy in this high-risk population.

To be presented at 2:00pm (Presentation A)



# ART suppressed HIV patients with opioid use disorder show a block in latency reversal

# Presented by Binita Basukala Department of Biology, Boston University, Boston, MA

Of the 12 million people who inject drugs worldwide, 13% live with HIV. Chronic opioid use affects host immune system and increases an individual's susceptibility to HIV infection.

However, it is unclear how opioid use changes the course of HIV pathogenesis. Particularly, there is a gap in understanding how opioids impact HIV latency. Latency results in a reservoir of infected quiescent cells that evade antiviral immune responses, are not targeted by ART, and allow HIV viremia to rebound upon treatment interruption. In vitro studies show that opioids modulate activity of transcription factors involved in T cell activation and HIV transcription. We hypothesize that chronic opioid use shapes HIV reservoir towards persistently infected cells that are resistant to reactivation. We utilized PBMCs from People living with HIV (PLWH) with/without recent opioid use or opioid use disorder (OUD) who were enrolled in the St. PETER and LINC-II studies conducted in Russia. Intact proviral DNA ddPCR assays were performed on peripheral blood mononuclear cells from ART treated PLWH with (n=8) or without (n=13) OUD to quantify intact and defective proviral genome. Samples from ART treated PLWH with OUD compared to those without OUD had similar ratios of intact and defective proviruses. To evaluate latency reversal, we activated PBMCs from ART treated PLWH with/without OUD with CD3/28 beads and performed RT-ddPCR assays for HIV RNA. We saw variable response in PLWH without OUD where half of the samples showed an increase in HIV RNA upon activation. Interestingly, only 1 of 8 samples from PLWH with OUD showed an increase in HIV transcription. We failed to observe suppression of HIV reactivation in vitro from latent cells generated using a primary CD4+ T cell latency model. We show that PLWH with OUD have a pool of persistent HIV proviruses that are refractive to reactivation although opioids did not affect HIV replication and latency reactivation in vitro. The discrepancy in our in vitro and in vivo results suggests that while opioids may not directly impact HIV replication, latency and reactivation in CD4+ cells, opioids may indirectly shape the HIV reservoir in vivo by modulating anti-HIV immune functions.

#### To be presented at 2:00pm (Presentation B)



# The effect of heavy alcohol consumption on plasma TMAO levels: A repeated cross-sectional study

Presented by Samuel Mensah, MD, MPH
Department of Medicine, Boston Medical Center, Boston, MA, USA

**Background:** Heavy alcohol consumption is associated with increased risk of cardiovascular disease. Alcohol-related alterations in the intestinal microbiome may be a novel mechanism

for this association. Trimethylamine n-oxide (TMAO) is an intestinal microbiome-dependent metabolite that is associated with increased risk of cardiovascular disease. We hypothesized that heavier alcohol consumption is associated with increased TMAO levels.

Methods: Participants were recruited from the St PETER HIV study, a clinical trial to reduce alcohol and smoking among persons living with HIV (PLWH) in Russia. Eligibility for the trial included at least five heavy drinking days in the 30 days prior to baseline, as assessed by the Timeline Follow Back (TLFB) method. Heavy drinking was defined as intake of greater than three standard drinks for women or greater than four standard drinks for men. Number of days on which heavy drinking occurred in the prior month, the main exposure, was measured at baseline and at 3-months. Plasma TMAO level, the outcome, was natural log transformed to approximate a normal distribution. Results were back transformed for ease of interpretation. A general additive model analysis was performed as the first step. In the absence of nonlinear association, a multiple linear regression estimated the association between number of heavy drinking days and plasma TMAO levels adjusting for age, gender, BMI, renal function, HIV viral load and recent seafood consumption.

**Results:** Participants (N=400) had the following characteristics at baseline: mean age 38 +6 years, 34% female. The median (interquartile range) number of heavy drinking days in the past month was 8 (6,10) days. The median (interquartile range) plasma TMAO was 4.0 (2.3, 6.0)  $\mu$ M. The general additive model suggested a linear relationship between number of heavy drinking days and log plasma TMAO. In the multivariable regression analysis, we did not detect a significant association between heavy drinking days and plasma TMAO after adjusting for confounders (beta = 1.00, 95% CI: 0.99, 1.01, p=0.53).

**Conclusion:** We did not detect an association between heavy drinking days and TMAO levels in this sample of PLWH with heavy alcohol use. Future work should consider using blood-based biomarkers of alcohol consumption, phosphatidylethanol (PEth).

To be presented at 2:15pm (Presentation A)



The prevalence and correlates of alcohol use and alcohol use disorders among young people (15 – 24 years) and adults in Eswatini, Malawi and Zambia

# Presented by Zethu Msibi, MS Division of Epidemiology and Biostatistics, School of Public Health, University of the Witwatersrand

**Background:** Excessive alcohol use is a remarkable trouble in public health worldwide. It is escalating in Sub-Saharan Africa due to marketing aggressively and lack of individual and policy level interventions. We used the national representative population-based HIV Impact Assessment (PHIA) data to determine the prevalence and correlates of alcohol use (AU) and alcohol use disorders (AUD) in young people and adults in Eswatini, Malawi and Zambia. **Methods:** PHIA surveys 2015 – 2017data was analyzed. The surveys employed multistage sampling strategy to recruit study participants at household level. The sample in each country dataset were as follows Eswatini(n=9885)

Malawi(n=19405), and Zambia(n=27,382). The analysis utilized multivariable models of logistic regression models that identify the correlates of AU and AUD. Analyses was adjusted for weights, stratification, and clustering using the survey platform analysis in Stata version 15. P-value of <0.05 was considered statistically significant.

**Results:** AU prevalence in young people and adults was 17.9% and 23.3% in Eswatini, 10.9% and 22.1% in Malawi, and 14.6% and 32.4% in Zambia. The prevalence of AUD in young people and adults was 9.1% and 14.2% in Eswatini, 3.5% and 11.2% in Malawi, and 7.6% and 20.6% in Zambia. The correlates of AU and AUD encompass being male (aOR: 4.62 (95% CI: 3.35 -5.79), age group, higher education level (aOR: 1.70, 95% CI: 1.16 -2.48), divorced or separated or widowed in all 3 countries (aOR: 1.96, 95% CI: 1.55 -2.48), HIV positive status in Zambia (aOR: 1.49, 95% CI: 1.12 -1.99), multiple sexual partners in Malawi (aOR: 11.90, 95% CI: 6.76 -20.93), employed class in Zambia (aOR: 2.06, 95% CI: 1.64 -2.59) and engaging in commercial sexual relations in Malawi.

**Conclusion:** The reported AU and AUD are common in youth and adults in Eswatini, Malawi and Zambia. Both AU and AUD are related with being male, age group 20 – 24 years old, educational level (higher), HIV status, transactional sex and multiple sexual partners, widowed or separated and HIV status and risky sexual behaviours in the three countries. There is an urgent need for targeted alcohol interventions and such interventions could be integrated with sexual and reproductive health programs.

To be presented at 2:15pm (Presentation B)



# Effect of alcohol consumption on CD4 recovery after antiretroviral therapy initiation

#### Presented by Angela McLaughlin, MD, MPH

Section of Infectious Diseases, Department of Medicine, Boston Medical Center, Boston, Massachusetts, USA

Background: Alcohol is immunomodulatory and widely consumed by people with HIV. Slowed CD4 recovery after initiating antiretroviral therapy (ART) is associated with worse HIV outcomes, so understanding alcohol's effect on this process has high clinical relevance. We hypothesized that alcohol consumption at ART initiation is associated with slower CD4 recovery.

Methods: We retrospectively analyzed two pooled longitudinal alcohol/HIV cohorts (2014-2019) in St. Petersburg, Russia. Eligible participants were ART naïve at enrollment, initiated ART during the study, and self-reported adherence ≥80%. We assessed alcohol consumption by the validated blood biomarker phosphatidylethanol (PEth) and categorized as low, moderate, and high based on median PEth 80 ng/mL (<8, 8-80, and >80 ng/mL, respectively). Our secondary alcohol measure was self-reported number of prior-month heavy drinking days (>4 drinks/day for males and >3 drinks/day for females). We used random effects piecewise linear regression to estimate the mean CD4 count at ART initiation and the slope of CD4 recovery by alcohol group.

**Results:** Of 54 eligible participants, average age was 35 years and 27% were female. Mean pre-ART alcohol consumption in the low, moderate, and high drinking groups were PEth 1, 30, and 339 ng/mL and monthly heavy drinking days 2.3, 4.8, and 7.4, respectively. Corresponding CD4 counts at ART initiation were 487, 433, and 393 cells/mm3. After starting ART, CD4 count increased monthly by 13.6 cells/mm3 (95% CI 0.33, 26.9) with low alcohol consumption, 1.37 cells/mm3 (95% CI -5.62, 8.35) with moderate consumption, and 2.52 cells/mm3 (95% CI -3.98, 9.02) with high consumption (Figure).

**Conclusions:** Among Russians with HIV, we observed faster CD4 recovery after ART initiation in those with low compared to moderate and high alcohol consumption. Future studies will use continuous alcohol measures to assess the threshold above which CD4 recovery slows and will evaluate associations between alcohol and other cell counts and presence of clinical infections.

To be presented at 2:30pm (Presentation A)



# Associations between alcohol use and antiretroviral therapy uptake among people living with HIV in rural Uganda

#### Presented by Adriane Wynn, PhD

Division of Infectious Diseases and Global Public Health, University of California, San Diego, La Jolla, CA, USA

**Background:** Alcohol use among people living with HIV (PLHIV) is common and associated with negative impacts on the HIV care cascade. In 2017, Uganda implemented the universal test-and-treat (UTT) strategy, which expanded access to antiretroviral therapy (ART) to all PLHIV. However, gaps in ART coverage persist in certain populations. We evaluated the relationship between alcohol and ART uptake among PLHIV and linked to care in Uganda. We also assessed ART adherence among a sub-sample of participants.

Methods: PATH/Ekkubo is a cluster-randomized trial evaluating a linkage to HIV care intervention in four rural Ugandan districts, Nov 2017-Sept 2021. Our sample included: 1) baseline data from individuals not enrolled in the trial (previously diagnosed HIV+ and linked to care); and 12-month follow-up data from those enrolled in the control group (previously diagnosed, but not linked to care, or newly diagnosed HIV+ at enrollment). Alcohol use was measured as any current (AUDIT-C>0), harmful (AUDIT-C women ≥3, men 4≥), and binge use (≥6 drinks on one occasion). ART use was assessed with, "Are you taking ARVs?" ART and alcohol use were examined using logistic regressions adjusting for age, gender,

marriage, education, religion, wealth, depression, and baseline or control group. We assessed ART adherence among the control group, dichotomized as any versus no missed doses in the past four days.

**Results:** Among 931 HIV+ adults, 40% reported current alcohol (32% of women, 61% of men); 21% reported harmful (19% of women, 28% of men); and 18% reported binge use (14% of women, 29% of men). In multivariable models, those with current (adjusted Odds Ratio [aOR] 0.46; 95% CI: 0.30-0.72), harmful (aOR 0.32; 95% CI: 0.20-0.51), and binge use (aOR 0.32; 95% CI: 0.19-0.51) were significantly less likely to be on ART. In the sub-analysis, current (aOR 5.25; 95% CI: 1.69-16.33) and binge use (aOR 5.16; 95% CI: 1.45-18.35) were associated with increased odds of missed ART doses. **Conclusions:** Any current, harmful, and binge alcohol use were associated with lower uptake of ART and adherence. Tailored interventions for individuals who use alcohol may be needed to optimize the benefits of the UTT strategy.

To be presented at 2:30pm (Presentation B)



#### 2022 URBAN ARCH Annual Meeting Participants

#### Ana Abrantes, PhD

Professor of Psychiatry and Human Behavior Brown University 345 Blackstone Blvd. Providence, RI 02906 (401) 455-6440 ana abrantes@brown.edu

#### Mike Barry, MPH

PhD Candidate
University of Washington, Department of Epidemiology
UW Box # 351619
Seattle, WA 98195
(206) 543-1065
mpbarry@uw.edu

#### Binita Basukala, B. Tech

PhD Candidate
Boston University Molecular Biology, Cell Biology and
Biochemistry
650 Albany St
Boston, MA 02118
(617) 306-9019
binitab@bu.edu

#### Aga Bereznicka, MPH

Research Coordinator Boston Medical Center 801 Massachusetts Avenue, 2nd Floor Boston, MA 02118 (617) 414-6702 agata.bereznicka@bmc.org

#### Elena A. Blokhina, MD, PhD

Deputy Director, Valdman Institute of Pharmacology First St. Petersburg Pavlov State Medical University 197022 Lev Tolstoy St 6/8 St. Petersburg, Russia 011-8-901-373-5396 blokhinaelena@gmail.com

#### Carly Bridden, MA, MPH

Clinical Research Director Boston Medical Center 801 Massachusetts Avenue Boston, MA 02118 (617) 414-5768 carly.bridden@bmc.org

#### Kendall Bryant, PhD

Office of the Director NIAAA,
Director, HIV/AIDS Research/Coordinator, NIAAA/NIH
5635 Fishers Ln
Bethesda, MD 20892
(301) 402-0332
kbryant@mail.nih.gov

#### Maria Jose Bustamante, MA, MSc

PhD Candidate
Department of Psychological and Brain Sciences,
Boston University
900 Commonwealth Avenue, 2nd Floor
Boston, MA 02215
(617) 353-2580
majob@bu.edu

#### Katherine (Casy) Calver, PhD

Managing Editor, AODHEALTH & ASCP Boston Medical Center 801 Massachusetts Avenue, 2<sup>nd</sup> Floor Boston, MA 02118 (617) 414-6921 katherine.calver@bmc.org

#### Jules Canfield, MPH

Program Manager Boston Medical Center 801 Massachusetts Avenue Crosstown, 2nd Floor Boston, MA 02118 (617) 414-6905 jules.canfield@bmc.org

#### Lydia Carlson, MPH

Research Assistant II Boston Medical Center 801 Massachusetts Avenue, 2<sup>nd</sup> Floor Boston, MA 02118 (617) 414-6674 lydia.carlson@bmc.org

#### Gabriel Chamie, MD, MPH

Assistant Professor, Medicine University of California, San Francisco 1001 Potrero Ave San Francisco CA 94110 415-476-4082, x445 gabriel.chamie@ucsf.edu

#### Geetanjali Chander, MD, MPH

Professor of Medicine and Division Head General Internal Medicine University of Washington (410) 207-8603 gchander@uw.edu

#### Debbie Cheng, ScD

Professor, Dept. of Biostatistics Boston University School of Public Health 801 Massachusetts Avenue., 3<sup>rd</sup> Floor Boston, MA 02118 (617) 358-2525 dmcheng@bu.edu

#### Natalie Chichetto, PhD, MSW

Assistant Professor University of Florida PO Box 100165 Dept. of Epidemiology Gainesville, FL 32610 (352) 273-8349 nchichetto@ufl.edu

#### Patricia Cioe, PhD, CNP

Associate Professor, Center for Alcohol & Addiction Studies
Brown University Department of Behavioral and Social Sciences
Box G-S121-4
Providence, RI 02912
(401) 863-6578
patricia\_cioe@brown.edu

#### Susan Cu-Uvin, MD

Director, Prov/Boston CFAR Leadership Committee, Administrative Core, and Global Health Initiative, Professor, Brown University (401) 793-4775 scu-uvin@lifespan.org

#### Margaret Doyle, PhD

Assistant Professor, Dept. of Pathology & Laboratory Medicine
University of Vermont
360 South Park Drive 214B
Colchester, VT 05446
(802) 656-8964
margaret.doyle@uvm.edu

#### Nneka Emenyonu, DrPH, MPH

Project Director, Infectious Diseases San Francisco General Hospital University of California, San Francisco Box 1224 San Francisco, CA 94143 (415) 476-5806 nneka.emenyonu@ucsf.edu

#### Robin Fatch, MPH

Research Data Analyst
University of California, San Francisco
Division of HIV, Infectious Diseases & Global Medicine
Box 1224
550 16th St., Floor 4
San Francisco, CA 94143
(415) 476-5813
robin.fatch@ucsf.edu

#### Kenneth Freedberg, MD, MSc

Mngmt.
Harvard Medical School and School of Public Health 50 Staniford St.
MGH, 9th Floor
Boston, MA 02114
(617) 724-3341
kfreedberg@mgh.harvard.edu

Professor, Depts. of Medicine, and Health Policy and

#### Matthew Freiberg, MD, MSc

Professor, Dept. of Medicine Vanderbilt University Medical Center 2525 West End, Suite 300-A Nashville, TN 37203 (615) 875-9729 matthew.s.freiberg@vumc.org

#### Neo Gebru, MS

PhD Candidate
Department of Health Education & Behavior
College of Health and Human Performance
University of Florida
P.O. Box 118210
Gainesville, FL 32611
(352) 294-3347
ngebru@ufl.edu

#### Simone Gill, PhD, OT, OTR

Associate Professor Boston University Department of Occupational Therapy 635 Commonwealth Avenue, Room 501, Boston, MA 02215 (617) 353-7513 simvgill@bu.edu

#### Natalia Gnatienko, MPH

Associate Director of Research Operations Boston Medical Center 801 Massachusetts Avenue, 2<sup>nd</sup> Floor Boston, MA 02118 (617) 414-3843 natalia.gnatienko@bmc.org

#### Judith Hahn, PhD, MA

Professor in Residence University of California, San Francisco at Mission Bay 550 16th St., 3<sup>rd</sup> Floor San Francisco, CA 94158 (415) 476-5815 judy.hahn@ucsf.edu

#### Miriam Harris, MD, MSc

Assistant Professor, Boston University School of Medicine Grayken Fellow in Addiction Medicine, Boston Medical Center 725 Albany Street, 5th Floor, Suite B

725 Albany Street, 5th Floor, Suite Boston, MA 02118 (617) 414-6625 miriam.harris@bmc.org

#### Roxana Hernandez, MPH

Policy Analyst
New York City Department of Health and Mental
Hygiene
42-09 28th Street
Long Island City, NY 11101
(212) 639-9675
rhernandez2@health.nyc.gov

#### Victor Hesselbrock, PhD

Professor and Vice Chair, Dept. of Psychiatry University of Connecticut Health Center, MC1410 263 Farmington Avenue Farmington, CT 06030 (860) 679-1283 hesselbrock@uchc.edu

#### Kimberly Hook, PhD, MA

Postdoctoral Fellow Boston Medical Center Department of Psychiatry 850 Harrison Avenue, 9th Floor Boston, MA 02118 (617) 414-1955 kimberly.hook@bmc.org

#### Charles R Horsburgh, Jr., MD, MS

Professor, Depts. of Epidemiology, Biostatistics, Global Health, and Medicine Boston University 715 Albany St Talbot Building Boston, MA 02118 (617) 358-3758 rhorsbu@bu.edu

#### Bulat Idrisov, MD, MSc

PhD Candidate
University of Washington
Assistant Professor
Bashkir State Medical University
Ulitsa Lenina, 3, Ufa
Republic of Bashkortostan, Russia
7-917-777-73-04
bidrisov@gmail.com

#### Karen Jacobson, MD, MPH

Associate Professor of Medicine Boston University School of Medicine 801 Massachusetts Avenue Boston, MA 02118 (617) 414-5213 karen.jacobson@bmc.org

#### Ashly Jordan, PhD, MPH

Senior Epidemiologist New York City Department of Health and Mental Hygiene 42-09 28th Street Long Island City, NY 11101 (212) 639-9675 ajordan2@health.nyc.gov

#### Amy Justice, MD, PhD

C.N.H. Long Professor of Medicine (General Medicine) and Professor of Public Health (Health Policy)
Co-Leader, Cancer Microbiology
950 Campbell Avenue,
Ste Building 35a Room 2-212
West Haven, CT, 06516
(203) 932-5711 Ext: 3541
amy.justice2@med.va.gov

#### Christopher Kahler, PhD

Providence/Boston CFAR Substance Use Core Director Professor, Brown University
Department of Behavioral and Social Sciences
Center for Alcohol and Addiction Studies
School of Public Health
Box G-S121-4
Providence, RI 02912
(401) 863-6651
christopher\_kahler@brown.edu

#### Seth Kalichman, PhD

Professor, Dept. of Psychology University of Connecticut 406 Babbidge Rd., Unit 1020 Storrs, CT 06269 (860) 486-4042 seth.k@uconn.edu

#### Jeremy Kane, MPH, PhD

Assistant Professor of Epidemiology Columbia University 722 W 168th St., Room 519 New York City, NY 10032 jk4397@cumc.columbia.edu

#### Skylar Karzhevsky

Research Assistant
Boston University School of Public Health
801 Massachusetts Avenue
Boston, MA 02118
(617) 358-2047
skylarak@bu.edu

#### Allen Kekibiina, MPH

Study Coordinator, Global Health Collaborative Mbarara University of Science and Technology P.O Box 1410 Mbarara, Uganda 256-751-875-761 akeki2009@gmail.com

#### Theresa Kim. MD

Assistant Professor of Medicine Boston University School of Medicine 801 Massachusetts Avenue, 2nd Floor Boston, MA 02118 (617) 414-6932 theresa.kim@bmc.org

#### Tetiana Kiriazova, MS, PhD

Executive Director
Ukrainian Institute on Public Health Policy
t.kiryazova@gmail.com

#### Sarah Koberna, MA

Project Management Specialist Boston Medical Center 801 Massachusetts Avenue, 2nd Floor Boston, MA 02118 (617) 414-6703 sarah.koberna@bmc.org

#### Evgeny Krupitsky, MD, PhD, DMSci

Chief, Lab of Clinical Pharmacology of Addictions
Pavlov State Medical University
Chief, Department of Addictions
St. Petersburg Bekhterev Psychoneurological Research
Institute
Bekhtereva St, 3,
St. Petersburg, Russia
011-7-901-300-5811
kruenator@gmail.com

#### Suchitra Kulkarni, MPH

Administrative Manager Boston Medical Center 801 Massachusetts Avenue Boston, MA 02118 (617) 414-5403 suchitra.kulkarni@bmc.org

#### Alan Landay, PhD

Professor, Rush Medical College
Vice Chair of Research and Division Chief of
Translational and Precision Medicine, Department of
Internal Medicine
1735 W. Harrison St.
Chicago, IL 60612
(312) 942-6554
alanday@rush.edu

#### Dmitry Lioznov, MD, PhD

Deputy Director for Research, Research Institute of Influenza Head, Department of Infectious Diseases and Epidemiology Pavlov State Medical University 6/8 Lev Tolstoy St. 197089 St. Petersburg, Russia 011-812-499-7058 dlioznov@yandex.ru

#### Christine Lloyd-Travaglini, MPH

Statistical Manager
Biostatistics and Epidemiology Data Analytics Center
Boston University School of Public Health
85 East Newton St.
(617) 358-7895
clloyd@bu.edu

#### Sara Lodi, PhD

Assistant Professor, Dept. of Biostatistics Boston University School of Public Health 801 Massachusetts Avenue, 3<sup>rd</sup> floor Boston, MA 02118 (617) 638-5160 slodi@bu.edu

#### Natasha Ludwig, PhD, MPH

Postdoctoral Fellow University of California, San Francisco School of Medicine 533 Parnassus Avenue. San Francisco, CA 94143 (415) 502-1000 natasha.ludwig@ucsf.edu

#### Karsten Lunze, MD, MPH, DrPH

Assistant Professor, Dept. of Medicine Boston University School of Medicine 801 Massachusetts Avenue., 2<sup>nd</sup> Floor Boston, MA 02118 (617) 414-6933 karsten.lunze@bmc.org

#### Sophia Ly, MS

Program Coordinator Boston Medical Center 801 Massachusetts. Avenue Crosstown, 2<sup>nd</sup> Floor Boston, MA 02118 sophia.ly@bmc.org

#### Kara Magane, MS

Director of Research Operations
Boston University School of Public Health
801 Massachusetts Avenue
Crosstown, 4<sup>th</sup> Floor
(617) 358-1369
maganek@bu.edu

#### **Tiana Mason**

Research Study Assistant Dept. of Community Health Sciences Boston University School of Public Health 801 Massachusetts Avenue, 4<sup>th</sup> floor Boston, MA 02118 tjmason@bu.edu

#### Angela McLaughlin, MD, MPH

Infectious Diseases Fellow Boston Medical Center 725 Albany Street Boston, MA 02118 (617) 414-4290 angela.mclaughlin@bmc.org

#### Samuel Mensah, MD, MPH

Research Coordinator Boston Medical Center 801 Massachusetts Avenue Crosstown, 2nd Floor Boston, MA 02118 samuel.mensah2@bmc.org

#### Amanda Miller, MS

Doctoral Student/Graduate Student Researcher University of California, San Diego 9500 Gilman Drive La Jolla, CA 92093 (610) 203-1134 amandapearlviitanen@gmail.com

#### Zethu Msibi-Mamba

Health Systems Strengthening Coordinator Eswatini Ministry of Health MSc Candidate, University of Witwatersrand 1 Jan Smuts Avenue, Braamfontein 2000 Johannesburg, South Africa 268-79033694 zethumsibi@yahoo.com

#### Asri Mumpuni, MPH

Project Manager, Cardiovascular Medicine/V-CREATE Vanderbilt University Medical Center 2525 West End Ave, Suite 300-A Nashville, TN 37203 asri.mumpuni@vumc.org

#### Winnie Muyindike, MBChB, MMed

Director of Immune Suppression Syndrome Clinic Mbarara University of Science and Technology P.O Box 1410 Mbarara, Uganda 256-772-52-1619 wmuyindike@gmail.com

#### Tibor Palfai, PhD

Professor and Clinical Program Director Dept. of Psychological and Brain Sciences Boston University 900 Commonwealth Avenue. Boston, MA 02215 (617) 353-9345 palfai@bu.edu

#### **Gregory Patts, MPH**

Manager, Data Sciences
Biostatistics and Epidemiology Data Analytics Center
Boston University School of Public Health
85 East Newton St.
Boston, MA 02118
(617) 358-7894
gpatts@bu.edu

#### Sarah Puryear, MD, MPH

Assistant Professor, Medicine University of California, San Francisco 1001 Potrero Ave San Francisco CA 94110 (415) 476-2342 sarah.puryear@ucsf.edu

#### Lisa Quintiliani, PhD

Associate Professor, Medicine Boston University School of Medicine 801 Massachusetts Avenue Boston, MA 02118 (617) 638-2777 lisa.quintiliani@bmc.org

#### Sowmya Rao, PhD, FASA

Senior Research Scientist
Department of Global Health
Boston University School of Public Health
801 Massachusetts Avenue, 3<sup>rd</sup> Floor
Boston, MA 02118
(617) 638-5234
srrao@bu.edu

#### Rhonda Rosenburg, PhD

Research Associate Professor, Florida International University
Robert Stempel College of Public Health & Social Work Department of Health Promotion and Disease Prevention
Academic Health Center 5 (AHC5), Rm 405
11200 SW 8th St
Miami, FL 33199
305-919-4200
rosenr@fiu.edu

#### Sarah Rossi

Research Coordinator Boston Medical Center 801 Massachusetts Avenue, 2<sup>nd</sup> Floor Boston, MA 02118 (617) 414-6945 sarah.rossi@bmc.org

#### Nicolle Rueras, MPH

Research Project Manager Boston University School of Public Health 801 Massachusetts Avenue, 4<sup>th</sup> Floor Boston, MA 02118 (617)-358-1342 nrueras@bu.edu

#### Jeffrey Samet, MD, MA, MPH

John Noble, M.D. Professor in General Internal Medicine and Professor of Community Health Science
Boston University Schools of Medicine and Public Health
801 Massachusetts Avenue, 2<sup>nd</sup> Floor
Boston, MA 02118
(617) 414-7288
jsamet@bu.edu

#### Lauren Lee Shaffer, MA

Project Manager, Cardiovascular Medicine/V-CREATE & V-SERCH
Vanderbilt University Medical Center

Vanderbilt University Medical Center 2525 West End Ave, Suite 300-A Nashville, TN 37203 lauren.lee.shaffer@vumc.org

#### Maggie Shea

Statistical Programmer
Biostatistics and Epidemiology Data Analytics Center
Boston University School of Public Health
85 East Newton St.
Boston, MA 02118
(617) 358-0636
mgshea@bu.edu

#### Danny Shin, MOT

PhD Candidate
Boston University College of Health & Rehabilitation
Sciences: Sargent College
635 Commonwealth Ave
Boston, MA 02215
(617) 353-7472
ddshin@bu.edu

#### **Emily Smith, MPH**

Senior Program Manager, Cardiovascular Medicine/V-CREATE
Vanderbilt University Medical Center

2525 West End Ave, Suite 300-A Nashville, TN 37203 (615) 875-7253 emily.k.smith@vumc.org

#### Kaku So-Armah, PhD

Associate Professor, Dept. of Medicine Boston University School of Medicine 801 Massachusetts Avenue, 2<sup>nd</sup> Floor Boston, MA 02118 (617) 414-6624 kaku@bu.edu

#### Sergei Soshnikov, PhD

Assistant Professor Postdoctoral Fellow Bukhara State Medical Institute 1 Navai Avenue Bukhara, Uzbekistan 998-65-223-00-50 s.soshnikov@yahoo.com

#### Michael Stein, MD

Professor and Chair, Dept. of Health Law, Policy & Mgmt Boston University School of Public Health 715 Albany Street Boston, MA 02118 (617) 358-1956 mdstein@bu.edu

#### Hilary Tindle, MD, MPH

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) 2525 West End Avenue, Suite 370 Nashville, TN 37203 (615) 875-7810 hilary.tindle@vumc.org

#### Ve Truong

Senior Research Manager Boston Medical Center 801 Massachusetts Avenue, 2<sup>nd</sup> Floor Boston, MA 02118 (617) 414-6639 ve.truong@bmc.org

#### Judith Tsui, MD, MPH

Associate Professor, Dept. of Medicine University of Washington 325 Ninth Avenue, Campus Box 359780 Seattle WA, 98104 (415) 298-4528 tsuij@uw.edu

#### **Adah Tumwegamire**

Senior Data Manager Global Health Collaborative Mbarara University of Science and Technology P.O Box 1410 Mbarara, Uganda 256-751-875-761 adahtt@gmail.com

#### Jennifer Wagman, PHD, MHS

Associate Professor, University of California, Los Angeles
Department of Community Health Services, School of Public Health
650 Charles E. Young Drive, 46-071B, Box 951772
Los Angeles, CA 90095-1772
(310) 825 5047
jennwagman@ucla.edu

#### **Grace Wallace**

Project Manager, Cardiovascular Medicine/V-CREATE Vanderbilt University Medical Center 2525 West End Ave, Suite 300-A Nashville, TN 37203 (615) 936-5356 grace.wallace@vumc.org

#### Sarah Weber

Undergraduate Research Assistant Georgetown University Center for Global Health Science and Security Medical-Dental Building, NW 306 3900 Reservoir Road NW Washington DC 20057 (202) 687-9823 smw290@georgetown.edu

#### Alexander Walley, MD, MSc

Professor, Dept. of Medicine Boston University School of Medicine 801 Massachusetts Avenue, 2nd Floor Boston, MA 02118 (617) 414-6975 alexander.walley@bmc.org

#### Michael Winter, MPH

Associate Director
Biostatistics and Epidemiology Data Analytics Center
Boston University School of Public Health
85 East Newton St.
Boston, MA 02118
(617) 358-7904
mwinter@bu.edu

#### Tatiana Yaroslavtseva, MD

Site Project Manager Scientific Secretary, Valdman Institute of Pharmacology 197022 Lev Tolstoy Street 6/8 St. Petersburg, Russia 7(952)097-81-73 tatianayaroslavtseva@gmail.com

#### Sally Young, MPH

Senior Research Manager Boston Medical Center 801 Massachusetts Avenue, 2<sup>nd</sup> Floor Boston, MA 02118 (617) 414-3802 sally.bendiks@bmc.org



#### **International URBAN ARCH Center Program Advisory Committee**



Kendall Bryant, PhD
Director, HIV/AIDS Research, NIAAA
Scientific Collaborator, Consortiums for
HIV/AIDS and Alcohol Research
Translation (CHAART)
5635 Fishers Ln
Bethesda, MD 20892
(301) 402-0332
kbryant@mail.nih.gov



Victor Hesselbrock, PhD
Senior Associate Dean of Research,
University of Connecticut School of
Medicine
Univ. of Connecticut Health Center,
MC1410
263 Farmington Avenue
Farmington, CT 06030
(860) 679-4282
hesselbrock@uchc.edu



Geetanjali Chander, MD, MPH
Professor of Medicine and Division
Head
General Internal Medicine
University of Washington
(410) 207-8603
gchander@uw.edu



Charles R Horsburgh, Jr., MD, MS
Professor, Depts. of Epidemiology,
Biostatistics, Global Health, and
Medicine
Boston University
715 Albany St Talbot Building
Boston, MA 02118
(617) 358-3758
rhorsbu@bu.edu



Kenneth Freedberg, MD, MSc
Professor, Depts. of Medicine, and
Health Policy and Mngmt.
Harvard Medical School and School of
Public Health
50 Staniford St.
MGH, 9th Floor
Boston, MA 02114
(617) 724-3341
kfreedberg@mgh.harvard.edu



Mimi Kim, ScD
Professor, Department of Epidemiology & Population Health
Albert Einstein College of Medicine
1300 Morris Park Avenue
Belfer Building, Room 1303B
Bronx, NY 10461
(718) 430-2017
mimi.kim@einstein.yu.edu

# In memory of our dear colleague, Dr. Rich Saitz (1963 – 2022)



#### For Richard Saitz (1963-2022)

In September 2020, my friend and Boston University colleague Dr. Rich Saitz wrote to me: "I have the bad luck of having been diagnosed with an inoperable pancreatic adenocarcinoma. I have a P01 application in the works and I wondered if you might be willing and interested in taking it over?" Because Rich had work for me to do, I was among the first to know this terrible news. I was undone; the grant was due in eight weeks. I accepted the next day, and Rich and I become multiple PIs for the proposal.

As Rich began chemotherapy, he was hopeful that we could pull off the application and that he would be in better shape when we were eventually funded. I enjoined the wonderful senior investigators who now constitute the leadership of the ARCHER grant, who traced out the ideas you will read in this newsletter. We wrote fast, with Rich pitching his thoughts about the Aims from his sick bed. He was the Rich I had always known: a scold for clear thinking, an empirical stickler. He had strong opinions, but not inflexible ones. He wanted us to play to BU's strengths and past work, and also to be innovative. Because we were in the middle of the COVID-19 pandemic, our projects would live in the new world of telehealth.

For decades, Rich had been an influential writer and editor around the primary issues of clinical alcohol research, a mentor to many, a miner of good ideas, a keeper of common sense. He had directed Boston ARCH, the Boston Alcohol Research Collaboration on HIV/AIDS, which gave birth to ARCHER. So he was there from the beginning of this vein of work. His spirit, his direction and high standards, will be there until the end.

-Michael Stein



ARCH I Main Grants: Initial funding period (2011–2016)

The **U**ganda **R**ussia **B**oston **A**lcohol **N**etwork for **A**lcohol **R**esearch **C**ollaboration on **H**IV/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 cohorts of people with HIV (PWH) 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)

The Administrative Coordinating Core ensured that the scientific and programmatic goals of the URBAN ARCH Consortium were achieved with high quality and timeliness. The Admin Core oversaw the data and sample repository and encouraged 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 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 Russian ART-naive PWH 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 Russian PWH, 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.



ARCH II Main Grants: 2<sup>nd</sup> 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 cohorts of people with HIV 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.



#### URBAN ARCH Affiliated Studies Funded Since 2017

Since 2017, eleven new grants were awarded by NIH to the **U**ganda **R**ussia **B**oston **A**lcohol **N**etwork for **A**lcohol **R**esearch **C**ollaboration on **H**IV/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+s 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.

# URBAN ARCH (4/5) Russia Cohort – Targeting HIV-comorbidities with Pharmacotherapy to Reduce Alcohol and Tobacco Use in HIV-infected Russians

U01AA020780-10S1 (JH Samet / MS Freiberg / HA Tindle)

9/1/20-8/31/22

This competitive revision will examine whether COVID19 co-infection among PLWH who drink and smoke increases inflammation (e.g., IL-6), alters the gut microbiome by reducing beneficial butyrate-producing bacteria which protect the gut from microbial translocation, and, by extension, alters the plasma metabolome as reflected in lower plasma butyrate levels.

#### COVID-19 Pandemic-Related Changes in Alcohol Use among Persons with HIV

U01AA02784-10S1 (JA Hahn)

9/1/20-8/31/22

This supplement will quantify COVID-19 pandemic-related changes in alcohol use among persons with HIV with heavy alcohol use in various settings. This research will determine the impact of changes in alcohol use during and after the pandemic on antiretroviral (ART) adherence and viral suppression in PLWH with alcohol use disorder.

# URBAN ARCH (5/5) Boston Cohort – Alcohol and HIV-Associated Comorbidity and Complications: Frailty, Functional Impairment, Falls, and Fractures (The 4F Study)

U01AA020784-10S1 (R Saitz)

9/1/20-8/31/22

People living with HIV infection (PLWH) are at an increased risk for COVID-19, substance use, comorbidities, homelessness, frailty, and other symptoms that may be exacerbated by exposure to the pandemic. The goal of this study is to assess the impact of COVID-19 pandemic exposure and secondary stressors on alcohol and other drug use and HIV antiretroviral medication nonadherence among PLWH.



## **URBAN ARCH (2016-2021) 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†
Opportunistic infection 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

<sup>\*</sup>Boston ARCH/4F does not collect.

<sup>†</sup>Boston ARCH/4F collects from medical record.

**<sup>‡</sup>Uganda ARCH/ADEPTT does not collect.** 



## URBAN ARCH (2016-2021) Clinical Values and Samples Collected at Baseline or Screening

Tests Conducted	ADEPTT (Uganda)	St PETER (Russia)	4F Study (Boston)
HIV & Hepatitis	(Ogailua)	(Nussia)	(Boston)
CD4	х	х	х
Нер В	х		х
HCV Ab		х	х
HIV Antibody or Rapid HIV Test	х	х	х
HIV Viral Load	х	х	х
Heart, Kidney, Liver, & Lung Function	on		
AST/ALT	х	х	х
Blood Pressure	х	х	
Cholesterol		х	
СО		х	
Confirmatory TB (sputum)	х		
eGFR (creatinine)	х	х	х
HS CRP		х	
Substance Use			
BAC		х	х
Nicotine Metabolites (urine)		х	
PEth	х	х	
Other Clinical Values			
CBC	х		х
Height	х	Х	х
Hemoglobin		х	х
Platelets		х	х

Pregnancy (urine)	х	x	
Weight	х	х	х
Samples for Storage			
Hair	х		
Heparin Plasma and PBMCs		х	
Plasma	х	х	
Saliva			х
Serum		х	
Fecal		х	
Nasal Secretions		х	
Whole Blood	Dried Blood Spots	Dried Blood Spots 5ml Tube	



ADEPTT – Uganda ARCH (n=30	01/300)
<u>DEMOGRAPHICS</u>	N (%)
Age, mean (SD)	40.7 (9.6)
Male	147 (48.8)
Married	202 (67.1)
Basic education or higher*	81 (26.9)
Unemployed	12 (4.0)
HEALTH INDICATORS	
Depressive symptoms†	74 (24.6)
Antiretroviral medication, current	301 (100.0)
CD4 count, mean (SD)	706 (287)
HIV viral load suppressed, n=264	269 (91.8)
Hepatitis C infection (self-report)	N/A
Moderate/extreme pain interference, past 30 days	9 (3.0)
Experienced a fall, past 3 months	4 (1.3)
Broken bone from fall, past 3 months	1 (0.3)
TB, ever told by healthcare provider‡	1 (0.3)
Yes - Active	0 (0.0)
Yes - Latent	1 (0.3)
SUBSTANCE USE	
Alcohol use disorder, past year§	96 (32.0)
Hazardous alcohol use, past 3 months <sup>II</sup>	116 (38.7)
IDU as HIV transmission route	0 (0.0)
Any illicit opioid use, lifetime	0 (0.0)
Any illicit opioid use, past 3 months	0 (0.0)
Marijuana use, past 3 months	2 (0.7)
Cocaine use, past 3 months	0 (0.0)
Current smoker	35 (11.6)

<sup>\* ≥ 9</sup> grades

#### **URBAN ARCH Baseline Descriptive Data**

St. PETER – Russia ARCH (n= 400/400)		
<u>DEMOGRAPHICS</u>	N (%)	
Age, mean (SD)	38.6 (6.3)	
Male	263 (65.8)	
Married or living with a partner	197 (49.3)	
Basic education or higher*	390 (97.5)	
Unemployed	140 (35.0)	
HEALTH INDICATORS		
Depressive symptoms†	156 (39.1)	
Antiretroviral medication, current	290 (72.5)	
CD4 count, mean (SD)	392 (257)	
HIV viral load suppressed (<300)	227 (57.0)	
Hepatitis C infection (self-report)	315 (78.8)	
Moderate/extreme pain interference, past 30 days	31 (7.8)	
Experienced a fall, past 6 months	46 (11.5)	
Broken bone from fall, past 6 months	2 (0.5)	
TB, ever told by healthcare provider‡	52 (13.0)	
Yes - Active	25 (6.3)	
Yes - Latent	20 (5.0)	
SUBSTANCE USE		
Alcohol use disorder, past year§	366 (91.5)	
Heavy alcohol use, past 30 days "¥	398 (99.5)	
IDU as HIV transmission route	303 (75.8)	
Any illicit opioid use, lifetime	306 (76.5)	
Any illicit opioid use, past 30 days	97 (24.3)	
Marijuana use, past 30 days	46 (11.5)	
Cocaine use, past 30 days	3 (0.8)	
Current smoker¥	400 (100.0)	

<sup>\* &</sup>lt;u>></u> 9 grades

4F – Boston ARCH (n=251/40	00)
DEMAGERABLISE	
<u>DEMOGRAPHICS</u>	N (%)
Age, mean (SD)	52.1 (10.5)
Male	169 (67.3)
Married or partnered	129 (51.6)
Basic education or higher*	190 (75.7)
Unemployed	189 (75.3)
HEALTH INDICATORS	
Depressive symptoms†	136 (54.2)
Antiretroviral medication, current	237 (94.8)
CD4 count, mean (SD)	664 (375.1)
HIV viral load suppressed (<200)	208 (86.7)
Hepatitis C infection (ever diagnosed)	128 (51.4)
Moderate/extreme pain interference, past 4 weeks	100 (39.8)
Experienced a fall, past 6 months	87 (34.7)
Broken bone from fall, past 6 months	6 (2.4)
TB, ever told by healthcare provider‡	32 (12.7)
Yes - Active	9 (3.6)
Yes - Latent	23 (9.2)
SUBSTANCE USE	
Alcohol use disorder, past year§	106 (42.4)
Heavy alcohol use, past 14 days <sup>II</sup>	88 (35.1)
IDU as HIV transmission route	94 (37.8)
Any illicit opioid use, lifetime€	121 (68.8)
Any illicit opioid use, past 30 days	40 (15.9)
Marijuana use, past 30 days	125 (49.8)
Cocaine use, past 30 days	61 (24.3)
Current smoker	157 (62.8)

<sup>\* &</sup>gt; High school or GED

<sup>†</sup> Based on CESD > 16

<sup>‡</sup> Via self-report. Latent TB is an eligibility criterion, so participants are confirmed positive with a TB skin test prior to enrolling

<sup>§</sup> Based on DSM 5 criteria

<sup>||</sup> Based on AUDIT-C

<sup>†</sup> Based on CESD > 16

<sup>‡</sup> Via self-report. Study testing was not done.

<sup>§</sup> Based on DSM 5 criteria

II Based on TLFB, NIAAA consumption criteria

<sup>¥</sup> Eligibility criteria at screening

<sup>†</sup> Based on CESD > 10

<sup>‡</sup> Via self-report. Study testing was not done.

<sup>§</sup> Based on DSM 5 criteria

<sup>&</sup>lt;sup>II</sup> Based on TLFB, NIAAA consumption criteria

<sup>€</sup> ARCH Bone data



Uganda Russia Boston Alcohol Network for Alcohol Research Collaboration on HIV/AIDS (URBAN ARCH) Consortium

Data and Sample Repository

The URBAN ARCH Repository was established in 2011 and contains data and samples from 22 studies: 17 international studies (Uganda, Russia, India) and 5 US-based studies; and approximately 65,000 samples (Dried Blood Spots [DBS], plasma, serum, PBMCs, fecal) from the URBAN ARCH Consortium cohorts (and predecessor studies).

More information about the repository is available  $\underline{\text{here}}$ . Please contact Natalia Gnatienko (Natalia.gnatienko@bmc.org) for additional information.

Repository Overview and Additional Information			
Study (PI)	Description	Sample Size	
Russia – HIV Latent Reservoirs (Cheng, Henderson) (2018-2021) R61DA047032	A study to address how opioid use alters the immune response in HIV patients and to develop a method to assess HIV latency among people who use opioids	88*	
Russia – LINC-II (Samet) (2017-2022) R01DA045547	A two-armed randomized controlled trial among 225 HIV-positive PWID to implement and evaluate a multi-faceted intervention combining pharmacological therapy (i.e., rapid access to ART and receipt of naltrexone for opioid use disorder) and 12 months of strengths-based case management.	225	
Russia – ACME (Barve, Freiberg) (2017-2022) U01AA026222	A study nested within the St PETER HIV trial to determine if changes in the gut microbiome are associated with heavy alcohol use; to determine the effect of dysbiosis on intestinal permeability, microbial translocation, inflammation, and trimethylamine N-oxide (TMAO) levels; and if changes in the bacteria of the gut are associated with changes in cardiac structure and function.	200*	
Russia – St PETER HIV (Samet) (2017-2020) U01AA020780	A 4-arm placebo-controlled randomized controlled trial (RCT) among 400 HIV+ heavy drinking smokers to compare the effects of varenicline, cytisine, and nicotine replacement therapy (NRT) to reduce: 1) alcohol use and craving, 2) smoking; and 3) inflammation and risk for CHD and mortality.	400*	
Russia – TMAO (Samet, Freiberg) (2017-2020) R01AA025859	A study nested within the St PETER HIV trial to assess whether heavier alcohol use is associated with increased trimethylamine Noxide (TMAO), and subsequently whether increased TMAO levels are associated with subclinical measures and biomarkers of heart failure.	360*	
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.		12	
<b>Russia – PETER Pain</b> (Samet, Tsui) (2017-2019) <b>UH2AA026193</b>	A pilot study to assess the feasibility, tolerability, and safety of using low-dose naltrexone and standard dose nalmefene to treat pain among people living with HIV with alcohol use and chronic pain.	14	
Boston – 4F (Saitz) (2016-2021) U01AA020784	A prospective cohort study of HIV-positive patients with a high prevalence of exposure to alcohol, illicit drugs, and polypharmacy to 1) test the associations between alcohol (and illicit drugs and	251*	

	polypharmacy) and falls (fractures secondarily), and 2) test the	
	associations between alcohol use (and illicit drugs and	
	polypharmacy) and acute healthcare utilization.	
Russia – SCRIPT	A randomized, 2-arm pilot study, to support HIV-positive people	111
(Lunze) (2016-2018)	who inject drugs coping with dual internalized stigma related to HIV	
R00DA041245	and substance use, to compare Acceptance and Commitment	
	Therapy (ACT) with standard of care.	
Russia – ZINC	A double-blinded randomized controlled trial to assess the efficacy	254*
(Samet, Freiberg) (2012-2017)	of zinc supplementation vs. placebo among 254 HIV+ Russians from	
U01AA021989	the Russia ARCH Cohort, who were ART-naive at enrollment and	
	had a recent history of heavy drinking.	
Uganda – ADEPTT	A single-arm trial of TB preventive therapy to assess its toxicity,	302*
(Hahn) (2011-2021)	measure adherence, and determine whether its benefits outweigh	
U01AA020776	its risks when given to TB/HIV-positive drinkers (n=300).	
Boston ARCH Cohort	A prospective cohort study of 250 HIV-positive persons affected by	250*
(Saitz) (2011-2016)	multiple substances, a spectrum of alcohol use, and all with	230
U01AA020784	substance dependence or injection drug use.	
Uganda ARCH Cohort	A prospective cohort study of HIV-positive persons not on ART to	484*
(Hahn) (2011-2016)	examine the effect of heavy alcohol consumption on HIV disease	-70-7
U01AA020776	progression prior to ART initiation.	
Russia ARCH Cohort	A prospective cohort study of 351 HIV-positive and ART naïve	351*
(Samet) (2011-2016)	individuals to assess the relationship between alcohol consumption	331
U01AA020780	and biomarker (sCD14 and D-dimer) concentrations.	
Russia – LINC	A randomized control trial of 349 Russian HIV-positive people who	349
(Samet) (2011-2016)	inject drugs to improve upon the treat and retain dimensions of the	343
R01D032082	"seek, test, treat, and retain" paradigm in Russia.	
Uganda – BREATH	A prospective cohort study of 212 HIV-positive people who drink	381*
(Hahn) (2010-2014)	alcohol to quantify changes in alcohol consumption during the first	301
R21AA015897	year of HIV care.	
Russia – IMPACT	A cross-sectional study of HIV-positive Russian adults from the	167*
(Samet) (2008-2011)	HERMITAGE study to investigate the relationship between	107
R21DA025435	substance use and HIV disease progression.	
Boston – FASTPATH	A SAMHSA-funded clinical program of 450 patients, with alcohol or	265
(Walley) (2007-2012)	drug dependence who are at high-risk for transmitting or	203
H79TI018710	contracting HIV through risky drug or sexual behaviors, to provide	
H/311018/10	substance use treatment in conjunction with medical care and HIV	
	prevention and risk reduction counseling in primary care settings.	
India – TAJ	A cross-sectional study of 500 HIV-positive men, who purchase sex,	426
(Samet) (2007-2008)	and among HIV-positive women, who sell sex, recruited from	420
R01AA016059	Mumbai and Guntur to enable the development of intervention	
MOTUMOTOODS	research to address alcohol-related risky sex and, ultimately,	
	reduce the transmission of HIV in India.	
Russia – HERMITAGE	A randomized controlled trial of 700 HIV-positive patients with risky	700
	alcohol consumption to test the effectiveness of a US HIV	700
(Samet) (2006-2013) <b>R01AA016059</b>	·	
	secondary prevention program, Healthy Relationships Intervention.	101
Russia – PREVENT	A randomized controlled trial of 180 patients in treatment for a	181
(Samet) (2003-2007)	substance use disorder to develop and test the feasibility of	
R21AA014821	adapting and implementing an efficacious US HIV prevention	
D	intervention in a Russian substance use disorder treatment center.	F07."
Boston- HIV-LIVE	A prospective cohort study of 400 HIV-positive patients with a	597*
(Samet) (2000-2006)	history of alcohol use to investigate the relationship between	
R01AA13216	alcohol and HIV progression and related factors in the context of	
	the additional exposure of HCV infection.	



#### PUBLISHING STEPS FOR MANUSCRIPTS USING URBAN ARCH DATASETS

#### **Pre-writing phase**

- 1. Identify topic/research question, discuss with research team/mentors to develop objectives, hypotheses and key variables (e.g. outcomes and main independent variable).
- 2. Begin filling in the analytic plan with this preliminary information (available at www.urbanarch.org).
- 3. Present analytic plan at URBAN ARCH Steering Committee meeting to consult with Admin Core and BDM Core.
- 4. At the meeting, discuss potential coauthors and authorship order. Authors should include the BDM analyst, the statistician, and co-investigators, as applicable. Establishing authorship upfront helps research team members understand expectations for contributing. For cross-cohort papers, the Admin Core will facilitate authorship decisions.
- 5. Provide the title and finalized authorship information to Natalia by email, for inclusion on the URBAN ARCH Abstract/Manuscript list.
- 6. Work with the analyst and statistician to complete the analytic plan. In most cases an analytic plan will need to be completed with input from a statistician and coauthors before analysis takes place. The statistician and PI/mentor should sign off on the final version of the analytic plan prior to performing analysis and should be involved with revisions. Typically there are multiple stages in the analyses, each requiring a separate or revised analytic plan (provide copies to project manager).
- 7. When results are received, work with coauthors and data analysts on interpreting results. This can be done by email, small group meeting, at regular research team meetings, or at the steering committee meeting.

#### Writing phase

- 8. Write the 1st draft of the paper with all sections (e.g., background, methods, results, discussion) and email it out for input from coauthors providing a reasonable deadline. The draft should include a cover sheet with title, authors, and affiliations (consistent format).
- 9. Ask coauthors for potential journals in which to submit your manuscript. Seeing a 1st draft helps coauthors recommend appropriate journals. Once a journal has been decided on, properly format the paper (including references) and check submission requirements particular for that journal.
- 10. Incorporate feedback from coauthors and re-circulate. Several drafts will likely need to be circulated during the course of the writing process. Again, providing reasonable deadlines is helpful.
- 11. Acknowledge relevant funding sources and individuals in the manuscript text ask the PI or project manager for correct grant numbers and a disclosure statement. The U01s that the data come from and the U24s should be listed. Natalia can provide details for the U24s.
- 12. Allow coauthors to review and approve the final manuscript (ask them to confirm their affiliation and name spelling) before it is submitted.
- 13. Work with the study's project manager on submission. The Admin Core can provide assistance, as needed.
- 14. If revisions are requested from the Editor ("a revise and resubmit"), it is the responsibility of the first and senior authors to address all comments. Input from other co-authors should be requested, as needed. Create a letter that details all comments and responses and make changes in the manuscript text. Give coauthors the opportunity to review and approve the final revision (letter and manuscript) before it is resubmitted. Journals normally give a deadline (2-3 months) to address comments, so begin work as soon as possible. Examples of revision letters and responses can be obtained from the Admin Core.
- 15. If an article is rejected from a journal, share news and reviewer comments (if provided) with coauthors and get input on next journal to submit to. In most cases the content of the paper won't change. Check new journal's guidelines and reformat as necessary. Submit with project manager's help.
- 16. If you have not heard from a journal within 3 months after submission, check on the status.

#### **Publication phase**

- 17. Once a paper is accepted, notify the coauthors and project manager. Also let your institution's communication department know if they prepare press releases for publications.
- 18. When proofs/galleys are received, share with senior author and other coauthors as applicable so that the proofs can be carefully reviewed. Check for errors, and keep other edits to a minimum. You are usually given 24-48 hours to review and reply.
- 19. Once a paper is accepted ("in-press"), check the publisher's guidelines on submitting the accepted manuscript to NIH pubmed central so that a PMCID number is assigned. Project manager can help.
- 20. Once a paper has been published, share the full citation and/or PDF with coauthors. Also let Natalia know so that she can share the news on <a href="https://www.urbanarch.org">www.urbanarch.org</a> and update our abstract/manuscript list.
- 21. Ensure that the paper has been deposited into NIHMS, so that it can be linked to the appropriate grants and can receive a PMCID number. Guidelines for this process are available at <a href="http://publicaccess.nih.gov/">http://publicaccess.nih.gov/</a>.

#### Assistance:

- Check with the study's PI or project manager to see if administrative help is available (e.g., formatting references, online submission, communicating with coauthors and data managers). They can also provide examples of published manuscripts from the dataset you are using. If assistance is not available from the study, get in touch with the Admin Core.
- Guidance on publishing addiction research from the International Society of Addiction Journal Editors can be found at <a href="https://www.parint.org/tutorial.cfm">www.parint.org/tutorial.cfm</a> and <a href="https://www.parint.org/isajewebsite/isajebook2.htm">www.parint.org/isajewebsite/isajebook2.htm</a>. The CARE Unit has a hard copy of this book for review.



#### URBAN ARCH Publications (2012-2022)

#### 2022

Carroll JJ, Rossi SL, Vetrova MV, Kiriazova T, Lunze K. <u>Supporting the health of HIV-positive people who inject drugs during COVID-19 and beyond: Lessons for the United States from St. Petersburg, Russia</u>. *American Journal of Public Health*. 2022 Apr 1;112(S2);S123-S127.

Ngabirano C, Fatch R, Muyindike WR, Emenyonu NI, Adong J, Weiser SD, Samet JH, Cheng DM, Hahn JA. Exploring the association between social support and hazardous alcohol use among persons living with HIV in South Western Uganda. AIDS Behav. 2022 Jan 18.

Runels T, Ragan EJ, Ventura AS, Winter WR, White LF, Horsburgh RC, Samet JH, Saitz R, Jacobson KR. <u>Testing and treatment for latent tuberculosis infection in people living with HIV and substance dependence: a prospective cohort study</u>. *BMJ Open.* 2022;12:e058751. PMCID: PMC8915380

Vetrova M, Lodi S, Rateau L, Patts G, Blokhina E, Palatkin V, Yaroslavtseva T, Toussova O, Bushara N, Bendiks S, Gnatienko N, Krupitsky E, Lioznov D, Samet JH, Lunze K. <u>Stigma and ART initiation among people with HIV and a lifetime history of illicit drug use in Saint-Petersburg, Russia-A prospective cohort analysis</u>. *Int J Drug Policy*. 2022;102:103600. PMCID: PMC8960362

#### 2021

Bendiks S, Cheng DM, Blokhina E, Vetrova M, Verbitskaya E, Gnatienko N, Bryant K, Krupitsky E, Samet J, Tsui J. <u>Pilot study of tolerability and safety of opioid receptor antagonists as novel therapies for chronic pain among persons living with HIV with past year heavy drinking: a randomized controlled trial. *AIDS Care.* 2021;1-10. PMCID: PMC8421451</u>

Corcorran MA, Ludwig-Baron N, Cheng DM, Lioznov D, Gnatienko N, Patts G, So-Armah K, Blokhina E, Bendiks S, Krupitsky E, Samet JH, Tsui JI. <u>The Hepatitis C continuum of care among HIV-positive persons with heavy alcohol use in St. Petersburg, Russia.</u> *AIDS Behav.* 2021 Aug;25(8):2533-2541. PMCID: PMC8222188

Fuster D, Nunes D, Cheng DM, Saitz R, Samet JH. <u>Alcohol consumption and hepatitis C virus (HCV) RNA levels in HIV/HCV coinfected patients.</u> *Viruses.* April 2021;13(5):716. PMCID: PMC8142976

Fuster D, So-Armah K, Cheng DM, Coleman SM, Gnatienko N, Lioznov D, Krupitsky EM, Freiberg MS, Samet JH. <u>Lack of association between recent cannabis use and advanced liver fibrosis among HIV-positive heavy drinkers</u>. *Curr HIV Res.* 2021;19(4):324-331. PMCID: PMC8597417

Freiman JM, Fatch R, Cheng D, Emenyonu N, Ngabirano C, Geadas C, Adong J, Muyindike WR, Linas BP, Jacobson KR, Hahn JA. <u>Prevalence of elevated liver transaminases and their relationship with alcohol use in people living with HIV on anti-retroviral therapy in Uganda</u>. *PLoS One*. June 2021;16(6):e0250368. PMCID: PMC8168875

Gnatienko N, Calver K, Sullivan M, Forman LS, Heeren T, Blokhina E, Emenyonu N, Ventura AS, Tsui JI, Muyindike WR, Fatch R, Ngabirano C, Bridden C, Bryant K, Bazzi AR, Hahn JA. <u>Heavy alcohol use among women and men living with HIV in Uganda, Russia, and the United States.</u> *J Stud Alcohol Drugs*. July 2021;82(4):486-492. PMCID: PMC8356791

Hahn JA, Murnane PM, Vittinghoff E, Muyindike WR, Emenyonu NI, Fatch R, Chamie G, Haberer JE, Francis JM, Kapiga S, Jacobson K, Myers B, Couture MC, DiClemente RJ, Brown JL, So-Armah K, Sulkowski M, Marcus GM, Woolf-King S, Cook RL, Richards VL, Molina P, Ferguson T, Welsh D, Piano MR, Phillips SA, Stewart S, Afshar M, Page K, McGinnis K, Fiellin DA, Justice AC, Bryant K, Saitz R. <u>Factors associated with phosphatidylethanol (PEth) sensitivity for detecting unhealthy alcohol use: An individual patient data meta-analysis</u>. *Alcohol Clin Exp Res*. 2021 Jun;45(6):1166-1187. PMCID: PMC8254773

Kekibiina A, Adong J, Fatch R, Emenyonu NI, Marson K, Beesiga B, Lodi S, Muyindike WR, Kamya M, Chamie G, McDonell MG, Hahn JA. <u>Post-traumatic stress disorder among persons with HIV who engage in heavy alcohol consumption in southwestern Uganda</u>. *BMC Psychiatry*. September 2021;21(1):457. PMCID: PMC8449437

Leddy AM, Hahn JA, Getahun M, Emenyonu N, Woolf-King SE, Sanyu N, Katusiime A, Fatch R, Chander G, Hutton HE, Muyindike WR, Camlin C. <u>Cultural adaptation of an intervention to reduce hazardous alcohol use among people living with HIV in southwestern Uganda</u>. *AIDS Behav.* 2021 Dec;25(Suppl 3):237-250. PMCID: PMC8364558

Lodi S, Emenyonu NI, Marson K, Kwarisiima D, Fatch R, McDonell MG, Cheng DM, Thirumurthy H, Gandhi M, Camlin CS, Muyindike WR, Hahn JA, Chamie G. <u>The drinkers' intervention to prevent tuberculosis (DIPT) trial among heavy drinkers living with HIV in Uganda: study protocol of a 2×2 factorial trial.</u> *Trials.* May 2021;22(1):355. PMCID: PMC8136096

Lodi S, Freiberg M, Gnatienko N, Blokhina E, Yaroslavtseva T, Krupitsky E, Murray E, Samet JH, Cheng DM. <u>Perprotocol analysis of the ZINC trial for HIV disease among alcohol users</u>. *Trials*. Mar 2021;22(1):226. PMCID: PMC7989012

Metcalfe J, Bacchetti P, Esmail A, Reckers A, Aguilar D, Wen Anita, Huo S, Muyindike W, Hahn JA, Dheda K, Gandhi M, Gerona R. <u>Diagnostic accuracy of a liquid chromatography-tandem mass spectrometry assay in small hair samples for rifampin-resistant tuberculosis drug concentrations in a routine care setting</u>. *BMC Infect Dis.* 2021;21(99). PMCID: PMC7821664

Pierre F, Forman LS, Winter M, Cheng D, Ngabirano C, Emenyonu N, Hunt PW, Huang Y, Muyindike W, Samet J, Hahn JA, So-Armah K. <u>Alcohol consumption and tryptophan metabolism among people with HIV prior to antiretroviral therapy initiation: The Uganda ARCH cohort study</u>. *Alcohol Alcohol*. May 2021;12;57(2):219-225. PMCID: PMC8919408

Rossi SL, Sereda Y, Luoma J, Pavlov N, Toussova O, Vasileva J, Abramova K, Bendiks S, Kiriazova T, Vetrova M, Blokhina E, Krupitsky E, Lioznov D, Lodi S, Lunze K. <u>Addressing intersectional stigma as a care barrier for HIV-positive people who inject drugs: Design of an RCT in St. Petersburg, Russia</u>. *Contemp Clin Trials Commun*. 2021;24:100861. PMCID: PMC8636824

Vetrova M, Cheng D, Bendiks S, Gnatienko N, Lloyd-Travaglini C, Jiang W, Luoma J, Blokhina E, Krupitsky E, Lioznov D, Ekstrand M, Raj A, Samet J, Lunze K. <u>HIV and substance use stigma, intersectional stigma and healthcare among HIV-positive PWID in Russia</u>. *AIDS Behav*. 2021 Sep;25(9):2815-2826. PMCID: PMC8316484

#### 2020

Chaves K, Palfai TP, Cheng DM, Blokhina E, Gnatienko N, Quinn EK, Krupitsky E, Samet J. <u>Hazardous alcoholuse</u>, impulsivity, and HIV-risk behavior among HIV-positive Russian patients with a history of injection druguse. *Am. J. Addict*. 2020;30(2):164-172. PMCID: PMC8284872

Foley JD, Sheinfil A, Woolf-King SE, Fatch R, Emenyonu N, Muyindike WR, Kekibiina A, Ngabirano C, Samet JH, Cheng DM, Hahn JA. <u>Assessing the interaction between depressive symptoms and alcohol use prior to antiretroviral therapy on viral suppression among people living with HIV in Rural Uganda.</u> *AIDS Care*. 2020;32(10):1251-1257. PMCID: PMC7972246

Freiberg M, Cheng D, Gnatienko N, Blokhina E, Coleman S, Doyle M, Yaroslavtseva T, Bridden C, So-Armah K, Tracy R, Bryant K, Lioznov D, Krupitsky E, Samet J. Effect of zinc supplementation vs placebo on mortality risk and HIV disease progression among HIV-positive adults with heavy alcohol use. *JAMA Netw Open.* 2020;3(5):e204330. PMCID: PMC7210486

Kim T, Ventura AC, Winter MR, Heeren TC, Holick MF, Walley AY, Bryant KJ, Saitz R. <u>Alcohol and bone turnover markers among people living with HIV infection and substance use disorder</u>. *Alcohol Clin Exp Res.* March 2020;44(4):992-1000. PMCID: PMC7263383

Muyindike WR, Fatch R, Cheng D, Emenyonu N, Ngabirano C, Adong J, Linas B, Jacobson K, Hahn JA. <u>Tuberculin skin test positivity among HIV-infected alcohol drinkers on antiretrovirals in south-western Uganda</u>. *PLoS One*. July 2020;15(7):e0235261. PMCID: PMC7332058

Palfai TP, Saitz R, Kratzer MPL, Taylor JL, Otis JD, Bernstein JA. <u>An integrated videoconferencing intervention for chronic pain and heavy drinking among patients in HIV-care: a proof-of-concept study</u>. *AIDS Care*. 2020;32(9):1133-1140. PMCID: PMC7484138

Puryear SB, Fatch R, Beesiga B, Kekibiina A, Lodi S, Marson K, Emenyonu NI, Muyindike WR, Kwarisiima D, Hahn JA, Chamie G. <u>Higher levels of alcohol use are associated with latent tuberculosis infection in adults living with HIV</u>. *Clin Infect Dis.* 2021;72(5):865-868. PMCID: PMC7935375

Ragan EJ, Kleinman MB, Sweigart B, Gnatienko N, Parry CD, Horsburgh CR, LaValley MP, Myers B, Jacobson KR. <u>The impact of alcohol use on tuberculosis treatment outcomes: a systematic review and meta-analysis.</u> *Int J Tuberc Lung Dis.* 2020;24(1):73–82. PMCID: PMC7491444

Raja A, Heeren TC, Walley AY, Winter MR, Mesic A, Saitz R. <u>Food insecurity and substance use in people with</u> HIV infection and substance use disorder. *Substance Abuse*. May 2020;1-9. PMCID: PMC7644575

Sereda J, Kiriazova T, Makarenko O, Carroll J, Rybak N, Chybisov A, Bendiks S, Idrisov B, Dutta A, Gillani F, Samet J, Flanigan T, Lunze K. <u>Stigma and quality of co-located care for HIV-positive people in addiction treatment in Ukraine: a cross-sectional study</u>. *JIAS*. May 2020;23(5). PMCID: PMC7201176

Tindle H, Freiberg M, Gnatienko N, Blokhina E, Cheng D, Yaroslavtseva T, Bendiks S, Winter M, Krupitsky E. <u>Design of a randomized controlled trial of smoking cessation medications for alcohol reduction among HIV-positive heavy drinkers and daily smokers in St. Petersburg, Russia.</u> *Contemp Clin Trials Commun.* Sept 2020;19. PMCID: PMC7889999

Wagman JA, Wynn A, Matsuzaki M, Gnatienko N, Metsch LR, del Rio C, Feaster DJ, Nance RM, Whitney BM, Delaney JAC, Kahana SY, Crane HM, Chandler RK, Elliott JC, Altice F, Lucas GM, Mehta SH, Hirsch-Moverman Y, El-Sadr WM, Vu Q, Thanh BN, Springer SA, Tsui JI, Samet JH. <u>Hazardous alcohol use, antiretroviral therapy receipt and viral suppression in people living with HIV who inject drugs in the U.S., India, Russia, and Vietnam. AIDS. 2020;34(15)2285-2294. PMCID: PMC7951611</u>

White LF, Jiang W, Ma Y, So-Armah K, Samet JH, Cheng DM. <u>Tutorial in biostatistics: The use of generalized additive models to evaluate alcohol consumption as an exposure variable</u>. *Drug Alcohol Depend.* 2020;209:107944. PMCID: PMC7171980

#### 2019

Adong J, Fatch R, Emenyonu NI, Cheng DM, Muyindike WR, Ngabirano C, Kekibiina A, Woolf-King SE, Samet JH, Hahn JA. <u>Social desirability bias impacts self-reported alcohol use among persons with HIV in Uganda.</u> *Alcohol Clin Exp Res.* 2019;43(2). PMCID: PMC7411366

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

Blokhina E, Krupitsky EM, Cheng DM, Walley AY, Toussova O, Yaroslavtseva T, Gnatienko N, Bridden C, Forman L, Bendiks S, Samet JH. <u>Evolution of illicit opioid use among people with HIV infection in St Petersburg, Russia, in the period 2004-2015</u>. *HIV Medicine*. 2019;20(7):450-455. PMCID: PMC7255405

Palfai TP, Taylor JL, Saitz R, Kratzer MPL, Otis JD, Bernstein JA. <u>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</u>. *Addict Sci Clin Pract*. 2019;14(1):35. PMCID: PMC6714455

Puryear SB, Balzer LB, Ayieko J, Kwarisiima D, Hahn JA, Charlebois ED, Clark TD, Cohen CR, Bukusi EA, Kamya MR, Petersen ML, Havlir DV, Chamie G. <u>Associations between alcohol use and HIV care cascade outcomes among adults undergoing population-based HIV testing in East Africa</u>. *AIDS*. 2019; doi: 10.1097. PMCID: PMC7046088

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

So-Armah K, Cheng D, Frieberg M, Gnatienko N, Patts G, Ma Y, White L, Blokhina E, Lioznov D, Doyle M, Tracy R, Chichetto N, Bridden C, Bryant K, Krupitsky E, Samet J. <u>Association between alcohol use and inflammatory biomarkers over time among younger adults with HIV – The Russia ARCH observational study.</u> *PLoS One*. 2019;14(8): e0219710. PMCID: PMC6705834

So-Armah K, Freiberg M, Cheng D, Lim JK, Gnatienko N, Patts G, Doyle M, Fuster D, Lioznov D, Krupitsky E, Samet J. <u>Liver fibrosis and accelerated immune dysfunction (immunosenescence) among HIV-infected Russians with heavy alcohol consumption – an observational cross-sectional study.</u> *BMC Gastroenterol*. 2019;20(1):1. Published 2019 Dec 31. doi:10.1186/s12876-019-1136-4. PMCID: PMC6938606

Thakarar K, Walley AY, Heeren TC, Winter WR, 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. May 2019:1-5. PMID: 31686528. PMCID: PMC7198361

#### 2018

Adong J, Lindan C, Fatch R, Emenyonu NI, Muyindike WR, Ngabirano C, Winter MR, Lloyd-Travaglini C, Samet JH, Cheng DM, Hahn JA. <u>The relationship between spirituality/religiousness and unhealthy alcohol use among HIV-infected adults in southwestern Uganda</u>. *AIDS Behav*. 2018;22(6):1802-1813. PMCID: PMC5708153

Coleman SM, Gnatienko N, Lloyd-Travaglini CA, Winter MR, Bridden C, Blokhina E, Lioznov D, Adong J, Samet JH, Liegler T, Hahn JA. <u>False positive HIV diagnoses: Lessons from Ugandan and Russian research cohorts</u>. *HIV Clin Trials*. 2018;19(1):15-22. PMCID: PMC5949866

Forman LS, Patts GJ, Coleman S, Blokhina E, Lu J, Yaroslavtseva T, Gnatienko N, Krupitsky E, Samet JH, Chaisson CE. <u>Use of an android phone application for automated text messages in international settings: a case study in an HIV clinical trial in St. Petersburg, Russia. Clin Trials. 2018;15(1):36-43. PMCID: PMC5794610</u>

Freiman JM, Jacobson KR, Muyindike WR, Horsburgh CR, Ellner JJ, Hahn JA, Linas BP. <u>Isoniazid preventive</u> therapy for people with HIV who are heavy alcohol drinkers in high TB-/HIV-burden countries: A risk-benefit analysis. *J Acquir Immune Defic Syndr*. 2018;77(4):405-412. PMCID: PMC5825241

Gnatienko N, Freiberg MS, Blokhina E, Yaroslavtseva T, Bridden C, Cheng DM, Chaisson CE, Lioznov D, Bendiks S, Koerbel G, Coleman SM, Krupitsky E, Samet JH. <u>Design of a randomized controlled trial of zinc supplementation to improve markers of mortality and HIV disease progression in HIV-positive drinkers in St. Petersburg, Russia</u>. *HIV Clin Trials*. 2018;19(3):101-11. PMCID: PMC5957784

Gnatienko N, Wagman JA, Cheng DM, Bazzi AR, Raj A, Blokhina E, Toussova O, Forman LS, Lioznov D, Bridden C, Sullivan M, Bryant K, Samet JH, Tsui JI. <u>Serodiscordant partnerships and opportunities for pre-exposure prophylaxis among partners of women and men living with HIV in St. Petersburg, Russia.</u> *PLoS One.* 2018 13(11). PMCID: PMC6239322

Hahn JA, Cheng DM, Emenyonu NI, Lloyd-Travaglini C, Fatch R, Shade SB, Ngabirano C, Adong J, Bryant K, Muyindike WR, Samet JH. <u>Alcohol use and HIV disease progression in an antiretroviral naïve cohort</u>. *J Acquir Immune Defic Syndr*. 2018;77(5):492-501. PMCID: PMC5844835.

Kim TW, Walley AY, Ventura AS, Patts GJ, Heeren TC, Lerner GB, Mauricio N, Saitz R. <u>Polypharmacy and risk of falls and fractures for patients with HIV infection and substance dependence</u>. *AIDS Care*. 2018;30(2):150-159. PMCID: PMC5977400

Lasser KE, Lunze K, Cheng DM, Blokhina E, Walley AY, Tindle HA, Quinn E, Gnatienko N, Krupitsky E, Samet JH. <u>Depression and smoking characteristics among HIV-positive smokers in Russia: A cross-sectional study. PLoS One.</u> 2018 6;13(2). PMCID: PMC5800551

Lorkiewicz SA, Ventura AS, Heeren TC, Winter MR, Walley AY, Sullivan M, Samet JH, Saitz R. <u>Lifetime marijuana and alcohol use</u>, <u>and cognitive dysfunction in people with human immunodeficiency virus infection</u>. *Subst Abus*. 2018;39(1):116-123. PMCID: PMC5979270

Saitz R, Mesic A, Ventura AS, Winter MR, Heeren TC, Sullivan MM, Walley AY, Patts GJ, Meli SM, Holick MF, Kim TW, Bryant KJ, Samet JH. <u>Alcohol consumption and bone mineral density in people with HIV and substance use disorder:</u> A prospective cohort study. *Alcohol Clin Exp Res.* 2018. PMCID: PMC6281811

Wagman JA, Samet JH, Cheng DM, Gnatienko N, Raj A, Blokhina E, Toussova O, Forman LS, Lioznov D, Tsui JI. <u>Female gender and HIV transmission risk behaviors among people living with HIV who have used injection drugs in St. Petersburg, Russia.</u> *AIDS Behav.* 2018;22(9):2830-2839. NIHMSID: NIHMS970493

Woolf-King SE, Fatch R, Cheng DM, Muyindike W, Ngabirano C, Kekibiina A, Emenyonu N, Hahn JA. <u>Alcohol use and unprotected sex among HIV-infected Ugandan adults: Findings from an event-level study</u>. *Arch Sex Behav.* 2018;47(7):1937-1948. PMCID: PMC2607502

### 2017

Asiimwe SB, Fatch R, Patts G, Winter M, Lloyd-Travaglini C, Emenyonu N, Muyindike W, Kekibiina A, Blokhina E, Gnatienko N, Krupitsky E, Cheng DM, Samet JH, Hahn JA. <u>Alcohol types and HIV disease progression among HIV-infection drinkers not yet on antiretroviral therapy in Russia and Uganda</u>. *AIDS Behav.* 2017;21(Suppl 2):204-215. PMCID: PMC5660666

Edelman EJ, Lunze K, Cheng DM, Lioznov D, Quinn E, Bridden C, Chaisson C, Walley AY, Krupitsky E, Raj A, Samet JH. <u>HIV-related stigma and substance use in a Russian cohort of HIV-positive risky drinkers</u>. *AIDS Behav.* 2017;21(9):2618-2627. PMCID: PMC5856479

Edelman EJ, So-Armah K, Cheng D, Doyle M, Coleman S, Bridden C, Gnatienko N, Lioznov D, Blokhina E, Freiberg M, Krupitsky E, Emu B, Samet JH. <u>Impact of illicit opioid use on T cell subsets among HIV-infected adults</u>. *PLoS One*. 2017;12(5):e0176617. PMCID: PMC5417591

Emenyonu NI, Fatch R, Muyindike WR, Kekibiina A, Woolf-King S, Hahn JA. Randomized study of assessment effects on alcohol use by persons with HIV in rural Uganda. *J Stud Alcohol Drugs*. 2017;78(2):296-305. PMCID: PMC5554109

Godersky ME, Vercammen LK, Ventura AS, Walley AY, Saitz R. <u>Identification of non-steroidal anti-inflammatory drug use disorder: A case report</u>. *Addict Behav.* 2017;70:61-64. PMCID: PMC5370578. (Click <u>here</u> for a narrated author presentation)

Idrisov B, Lunze K, Cheng DM, Blokhina E, Gnatienko N, Patts GJ, Bridden C, Kleinman RE, Weiser SD, Krupitsky E, Samet JH. <u>Food insecurity</u>, <u>HIV disease progression and access to care among HIV-infected Russians not on ART</u>. *AIDS Behav*. 2017;21(12):3486-3495. PMCID: PMC5705384

Idrisov B, Lunze K, Cheng DM, Blokhina E, Gnatienko N, Quinn E, Bridden C, Walley AY, Bryant KJ, Lioznov D, Krupitsky E, Samet JH. Role of substance use in HIV care cascade outcomes among people who inject drugs in Russia. Addict Sci Clin Pract. 2017;12(1):30. PMCID: PMC5713116.

Kim TW, Walley AY, Heeren TC, Patts GJ, Ventura AS, Lerner GB, Mauricio N, Saitz S. <u>Polypharmacy and risk of non-fatal overdose for patients with HIV infection and substance dependence</u>. *J Subst Abuse Treat*. 2017;81:1–10.PMCID: PMC5966024

Kiriazova T, Lunze K, Raj A, Bushara N, Blokhina E, Krupitsky E, Bridden C, Lioznov D, Samet JH, Gifford A. <u>"It is easier for me to shoot up"</u>: stigma, abandonment, and why HIV-positive drug users in Russia fail to link to HIV care. *AIDS Care*. 2017;29(5):559-563. PMCID: PMC5350043.

Lunze K, Lioznov D, Cheng DM, Nikitin RV, Coleman SM, Bridden C, Blokhina E, Krupitsky E, Samet JH. <u>HIV stigma and unhealthy alcohol use among people living with HIV in Russia</u>. *AIDS Behav*. 2017;21(9):2609-2617.PMCID: PMC5709173

Muyindike WR, Lloyd-Travaglini C, Fatch R, Emenyonu NI, Adong J, Ngabirano C, Cheng DM, Winter MR, Samet JH, Hahn JA. <u>Phosphatidylethanol confirmed alcohol use among ART-naïve HIV-infected persons who denied consumption in rural Uganda</u>. *AIDS Care*. 2017;29(11)1442-1447. PMCID: PMC5554736

Nolan S, Walley AY, Heeren TC, Patts GJ, Ventura AS, Sullivan M, Samet JH, Saitz R. <u>HIV-infected individuals</u> who use alcohol and drugs and virologic suppression. *AIDS Care*. 2017;29(9):1129-1136. PMCID: PMC5543330

Patts GJ, Cheng DM, Emenyonu N, Bridden C, Gnatienko N, Lloyd-Travaglini CA, Ngabirano C, Yaroslavtseva T, Muyindike WR, Weiser SD, Krupitsky EM, Hahn JA, Samet JH. <u>Alcohol use and food insecurity among people living with HIV in Mbarara, Uganda and St. Petersburg, Russia</u>. *AIDS Behav*. 2017;21(3):724-733. PMCID: PMC5303539

So-Armah KA, Lim JK, Lo Re V, Tate JP, Chung-Chou HC, Butt AA, Gibert CL, Rimland D, Marconi VC, Goetz MB, Rodriguez-Barradas MC, DeBakey ME, Budoff MJ, Tindle HA, Samet JH, Justice AC, Freiberg MS. <u>FIB-4 stage of liver fibrosis predicts incident heart failure among HIV infected and uninfected patients</u>. *Hepatology*. 2017;66(4):1286-1295. PMCID: PMC5609079

Tsui JI, Cheng DM, Coleman SM, Blokhina E, Gnatienko N, Bryant K, Krupitsky E, Zvartau E, Samet JH. Pain and risk behaviors among HIV-infected persons in St. Petersburg, Russia. AIDS Behav. 2017;21(6):1775-1781. PMCID: PMC5408303

Ventura AS, Winter MR, Heeren TC, Sullivan M, Walley AY, Holick MF, Patts GJ, Meli SM, Samet JH, Saitz R. <u>Lifetime and recent alcohol use and bone mineral density in adults with HIV infection and substance</u> dependence. *Medicine: HIV/AIDS.* 2017;96(17):e6759. PMCID: PMC5413268

Walley AY, Cheng DM, Quinn EK, Blokhina E, Gnatienko K, Chaisson CE, Krupitsky E, Coffin PO, Samet JH. <u>Fatal and non-fatal overdose after narcology hospital discharge among Russians living with HIV/AIDS who inject drugs</u>. *Int J Drug Policy*. 2017;39:114-20. PMCID: PMC5191979

West BS, Cheng DM, Toussova O, Blokhina E, Gnatienko N, Liu K, Samet JH, Raj A. Contraceptive use among HIV-infected females with history of injection drug use in St. Petersburg, Russia. AIDS Behav. 2018 Jun;22(6):1787-1791. PMCID: PMC5960422

### 2016

Edelman EJ, Gordon KS, Tate JP, Becker WC, Bryant K, Crothers K, Gaither JR, Gibert CL, Gordon AJ, Marshall BDL, Rodriguez-Barradas MC, Samet JH, Skanderson M, Justice AC, Fiellin DA. The impact of prescribed opioids on CD4 cell count recovery among HIV-infected patients newly initiating antiretroviral therapy. HIV Med. 2016;17(10):728-739. PMCID: PMC5053822

Fairbairn NS, Walley AY, Cheng DM, Quinn EK, Bridden C, Chaisson C, Blokhina E, Lioznov D, Krupitsky E, Raj A, Samet JH. Mortality in HIV-infected substance users in Russia. *PLoS One*. 2016;11(11):e0166539. PMCID: PMC5127495

Fatch R, Emenyonu N, Muyindike W, Kekibiina A, Woolf-King S, Hahn JA. <u>Alcohol interactive toxicity beliefs and ART non-adherence among HIV-infected current drinkers in Mbarara, Uganda</u>. *AIDS Behav*. 2016;21(7):1812-1824. PMCID: PMC5116271

Gnatienko N, Han SC, Krupitsky E, Blokhina E, Bridden C, Chaisson CE, Cheng DM, Walley AY, Raj A, Samet JH. <u>Linking infectious and narcology Care (LINC) in Russia: design, intervention and implementation protocol</u>. *Addict Sci Clin Pract*. 2016;11(1):10. PMCID: PMC4855723

Hahn JA, Anton RF, Javors MA. <u>The formation, elimination, interpretation, and future research needs of Phosphatidylethanol for research studies and clinical practice.</u> *Alcohol Clin Exp Res.* 2016;40(11):2292-2295. PMCID: PMC5117827

Hahn JA, Emenyonu NI, Fatch R, Muyindike WR, Kekiibina A, Carrico AW, Woolf-King S, Shiboski S. <u>Declining and rebounding unhealthy alcohol consumption during the first year of HIV care in rural Uganda, using phosphatidylethanol to augment self-report</u>. *Addiction*. 2016;111(2):272-9. PMCID: PMC4715487

Lunze K, Raj A, Cheng DM, Quinn EK, Lunze FI, Liebschutz JM, Bridden C, Walley AY, Blokhina E, Krupitsky E, Samet JH. <u>Sexual violence from police and HIV risk behaviours among HIV-positive women who inject drugs in St. Petersburg, Russia: A mixed methods study. *J Int AIDS Soc.* 2016;19(4 Suppl 3):20877. PMCID: PMC4951542</u>

So-Armah KA, Edelman J, Cheng DM, Doyle MF, Patts GJ, Gnatienko N, Krupitsky EM, Samet JH, Freiberg MS. Effects of heavy drinking on T-cell phenotypes consistent with immunosenescence in untreated HIV infection. Alcohol Clin Exp Res. 2016;40(8):1737-43. PMCID: PMC5070699

So-Armah KA, Tate JP, Chang CH, Butt AA, Gerschenson M, Gibert CL, Leaf D, Rimland D, Rodriguez-Barradas MC, Budoff MJ, Samet JH, Kuller LH, Deeks SG, Crothers KA, Tracy RP, Crane HM, Sajadi MM, Tindle HA, Justice AC, Freiberg MS; The VACS Project Team. Do biomarkers of inflammation, monocyte activation and altered coagulation explain excess mortality between HIV infected and uninfected people? *J Acquir Immune Defic Syndr*. 2016;72(2):206-13. PMCID: PMC4867134

Thakarar K, Asiimwe SB, Cheng DM, Forman L, Ngabirano C, Muyindike WR, Emenyonu NI, Samet JH, Hahn JA. <u>Alcohol consumption in Ugandan HIV-infected household-brewers versus non-brewers</u>. *AIDS Behav*. 2016;20(10):2408-17. PMCID: PMC5025349

Tsui JI, Cheng DM, Quinn E, Bridden C, Merlin JS, Saitz R, Samet JH. <u>Pain and mortality risk in a cohort of HIV-infected persons with alcohol use disorders</u>. *AIDS Behav*. 2016;20(3):583-9. PMCID: PMC4777650

Tsui JI, Ko S, Krupitsky E, Lioznov D, Chaisson CE, Gnatienko N, Samet JH. <u>Insights on the Russian HCV care cascade: Minimal HCV treatment for HIV/HCV co-infected PWID in St. Petersburg.</u> *Hepatol Med Policy.* 2016, 1:13. PMCID: PMC5313079

Williams EC, Hahn JA, Saitz R, Bryant K, Lira MC, Samet JH. <u>Alcohol use and human immunodeficiency virus (HIV) infection: Current knowledge, implications, and future directions</u>. *Alcohol Clin Exp Res*. 2016;40(10):2056-2072. PMCID: PMC5119641

Woolf-King SE, Muyindike W, Hobbs MM, Kusasira A, Fatch R, Emenyonu N, Johnson MO, Hahn JA. <u>Vaginal Prostate Specific Antigen (PSA) is a useful biomarker of semen exposure among HIV-infected Ugandan women</u>. *AIDS Behav.* 2016;21(7):2141-2146. PMCID: PMC5123961

#### 2015

Asiimwe SB, Fatch R, Emenyonu NI, Muyindike WR, Kekibiina A, Santos GM, Greenfield TK, Hahn JA. <u>Comparison of traditional and novel self-report measures to an alcohol biomarker for quantifying alcohol consumption among HIV-infected adults in sub-Saharan Africa</u>. *Alcohol Clin Exp Res*. 2015;39(8):1518-27. PMCID: PMC4515166

Carrico AW, Hunt PW, Emenyonu NI, Muyindike W, Ngabirano C, Cheng DM, Winter MR, Samet JH, Hahn JA. <u>Unhealthy alcohol use is associated with monocyte activation prior to starting antiretroviral therapy</u>. *Alcohol Clin Exp Res*. 2015;39(12):2422-6. PMCID: PMC4712082

Edelman EJ, Cheng DM, Krupitsky EM, Bridden C, Quinn E, Walley AY, Lioznov D, Blokhina B, Zvartau E, Samet JH. <u>Heroin use and HIV disease progression: Results from a pilot study of a Russian cohort</u>. *AIDS Behav*. 2015;19(6):1089-1097. PMCID: PMC4440848

Lorkiewicz, S. <u>Marijuana use, heavy drinking, and cognitive dysfunction in people with human immunodeficiency virus-infection</u>. [Thesis]. Ann Arbor: Boston University. 2015.

Lunze K, Lunze F, Raj A, Samet J. <u>Stigma and human rights abuses against people who inject drugs in Russia – A qualitative investigation to inform policy and public health strategies</u>. *PLoS One*. 2015; 10(8): e0136030. PMCID: PMC4549320

Samet JH, Raj A, Cheng DM, Blokhina E, Bridden C, Chaisson CE, Walley AY, Palfai TP, Quinn EK, Zvartau E, Lioznov D, Krupitsky E. <u>HERMITAGE – A randomized controlled trial to reduce sexually transmitted infections and HIV risk behaviors among HIV-infected Russian drinkers.</u> *Addiction*. 2015; 110(1):80-90. PMCID: PMC4270840

Sundararajan R, Wyatt MA, Woolf-King S, Pisarski EE, Emenyonu N, Muyindike WR, Hahn JA, Ware NC. Qualitative study of changes in alcohol use among HIV-infected adults entering care and treatment for HIV/AIDS in rural southwest Uganda. *AIDS Behav.* 2015;19(4):732-741. PMCID: PMC4392168

Walley AY, Palmisano J, Sorensen-Alawad A, Chaisson C, Raj A, Samet JH, Drainoni ML. <u>Engagement and substance dependence in a primary care-based addiction treatment program for people infected with HIV and people at high-risk for HIV infection</u>. *J Subst Abuse Treat*. 2015;59:59-66.

Woolf-King SE, Fatch R, Emenyonu N, Muyindike W, Carrico AW, Maisto SA, Hahn JA. <u>Development and validation of the East Africa Alcohol Expectancy Scale (AFEXS)</u>. *J Stud Alcohol Drugs*. 2015;76(2):336-343. PMCID: PMC5405703

### 2014

Bajunirwe F, Haberer JE, Boum Y 2nd, Hunt P, Mocello R, Martin JN, Bangsberg DR, Hahn JA. <u>Comparison of self-reported alcohol consumption to phosphatidylethanol measurement among HIV-infected patients initiating antiretroviral treatment in southwestern Uganda</u>. *PLoS One*.2014;9(12):e113152. PMCID: PMC4249861

Drainoni ML, Farrell C, Sorensen-Alawad A, Palmisano JN, Chaisson C, Walley AY. <u>Patient perspectives of an integrated program of medical care and substance use treatment</u>. *AIDS Patient Care STDS*. 2014; 28(2): 71–81. PMCID: PMC3926137

Fuster D, Cheng DM, Quinn EK, Armah KA, Saitz R, Freiberg MS, Samet JH, Tsui JI. <u>Inflammatory cytokines and mortality in a cohort of HIV-infected adults with alcohol problems</u>. *AIDS*. 2014;28(7):1059-64. PMCID: PMC4105144

Fuster D, Cheng DM, Quinn EK, Nunes D, Saitz R, Samet JH, Tsui JI. <u>Chronic Hepatitis C virus infection is associated with all-cause and liver-related mortality in a cohort of HIV-infected patients with alcohol problems.</u> *Addiction*. 2014;109(1):62-70. PMCID: PMC3947001

Goodness TM, Palfai TP, Cheng DM, Coleman SM, Bridden C, Blokhina E, Krupitsky E, Samet JH. <u>Depressive symptoms and antiretroviral therapy (ART) initiation among HIV-infected Russian drinkers</u>. *AIDS Behav*. 2014;18(6):1085-1093. PMCID: PMC4020947

Hahn JA, Fatch R, Wanyenze RK, Baveewo S, Kamya MR, Bangsberg DR, Coates TJ. <u>Decreases in self-reported alcohol consumption following HIV counseling and testing at Mulago Hospital, Kampala, Uganda.</u> *BMC Infect Dis.* 2014;14(1):403. PMCID: PMC4223423

Jain J, Evans JL, Briceño A, Page K, Hahn JA. <u>Comparison of phosphatidylethanol results to self-reported alcohol consumption among young injection drug users</u>. *Alcohol Alcohol*. 2014;49(5):520-524. PMCID: PMC4128670

Lunze K, Raj A, Cheng DM, Sisson EK, Bridden C, Blokhina E, Walley AY, Krupitsky E, Samet JH. <u>Punitive policing and associated substance use risks among HIV-positive people in Russia who inject drugs.</u> *J Int AIDS Soc.* 2014;17:19043. PMCID: PMC4093768

Kiriazova T, Cheng DM, Coleman SM, Blokhina E, Krupitsky E, Lira MC, Bridden C, Raj A, Samet JH. <u>Factors associated with study attrition among HIV-infected risky drinkers in St. Petersburg, Russia.</u> *HIV Clin Trials*. 2014;15(3):116-125. PMCID: PMC4380146

Palfai TP, Cheng DM, Coleman SM, Bridden C, Krupitsky E, Samet JH. <u>The influence of depressive symptoms on alcohol use among HIV-infected Russian drinkers</u>. *Drug Alcohol Depend*. 2014;134:85-91. PMCID: PMC4524808

Silverman JG, Saggurti N, Cheng DM, Decker MR, Coleman SM, Bridden C, Pardeshi M, Dasgupta A, Samet JH, Raj A. <u>Associations of sex trafficking history with recent sexual risk among HIV-infected FSWs in India.</u> *AIDS Behav.* 2014;18(3):555-561. PMCID: PMC4111225

Tsui JI, Cheng DM, Coleman SM, Lira MC, Blokhina E, Bridden C, Krupitsky E, Samet JH. Pain is associated with risky drinking over time among HIV-infected persons in St. Petersburg, Russia. Drug Alcohol Depend. 2014;144:87-92. PMCID:PMC4252482

Walley AY, Cheng DM, Coleman SM, Krupitsky E, Raj A, Blokhina E, Bridden C, Chaisson CE, Lira MC, Samet JH. <u>Risk factors for recent nonfatal overdose among HIV-infected Russians who inject drugs.</u> *AIDS Care*. 2014;26(8):1013-1018.PMCID: PMC4040021

Armah KA, Quinn EK, Cheng DM, Tracy RP, Baker JV, Samet JH, Freiberg MS. <u>Human immunodeficiency virus</u>, <u>Hepatitis C, and inflammatory biomarkers in individuals with alcohol problems: A cross-sectional study</u>. *BMC Infect Dis*. 2013;13(1):399. PMCID: PMC3848623

Fuster D, Tsui JI, Cheng DM, Quinn EK, Armah KA, Nunes D, Freiberg M, Samet JH. <u>IL-6 is associated with non-invasive markers of liver fibrosis in HIV-infected patients with alcohol problems</u>. *AIDS Res Hum Retroviruses*. 2013;29(8):1110-1116. PMCID: PMC3715787

Fuster D, Tsui JI, Cheng DM, Quinn EK, Bridden C, Nunes D, Libman H, Saitz R, Samet JH. <u>Impact of lifetime alcohol use on liver fibrosis in a population of HIV-infected patients with and without Hepatitis C coinfection</u>. *Alcohol Clin Exp Res*. 2013;37(9):1527-1535. PMCID: PMC3758457

Lunze K, Cheng DM, Quinn E, Krupitsky E, Raj A, Walley AY, Bridden C, Chaisson C, Lioznov D, Blokhina E, Samet JH. <u>Nondisclosure of HIV infection to sex partners and alcohol's role: A Russian experience</u>. *AIDS Behav*. 2013;17(1):390-398. PMCID: PMC3634358. <u>Article in Russian</u>.

McGinnis KA, Justice AC, Kraemer KL, Saitz R, Bryant K, Fiellin DA. <u>Comparing alcohol screening measures</u> <u>among HIV-infected and -uninfected men.</u> *Alcohol Clin Exp Res.* 2013;37(3):435-442. PMCID: PMC4492202

Raj A, Kidd JD, Cheng DM, Coleman S, Bridden C, Blokhina EA, Krupitsky E, Samet JH. <u>Associations between partner violence perpetration and history of STI among HIV-infected substance using men in Russia</u>. *AIDS Care*. 2013;25(5):646-651. PMCID: PMC3582729

Saggurti N, Raj A, Mahapatra B, Cheng DM, Coleman S, Bridden C, Battala M, Silverman JG, Pardeshi MH, Samet JH. <u>Prevalence and correlates of non-disclosure of HIV serostatus to sex partners among HIV-infected female sex workers and HIV-infected male clients of female sex workers in India.</u> *AIDS Behav.* 2013;17(1):399-406. PMCID: PMC3634359

Tsui JI, Cheng DM, Coleman SM, Blokhina E, Bridden C, Krupitsky E, Samet JH. <u>Pain is associated with heroin</u> use over time in HIV-infected Russian drinkers. *Addiction*. 2013;108(10):1779-1787. PMCID: PMC4012755

Tsui, JI, Cheng DM, Libman H, Bridden C, Saitz R, Samet JH. <u>Risky alcohol use and serum aminotransferase</u> <u>levels in HIV-infected adults with and without Hepatitis C.</u> *J Stud Alcohol Drugs*. 2013;74(2):266-270. PMCID: PMC3568165

Tyurina A, Krupitsky E, Cheng DM, Coleman SM, Walley AY, Bridden C, Gnatienko N, Zvartau E, Raj A, Samet JH. <u>Is cannabis use associated with HIV drug and sex risk behaviors among Russian HIV-infected risky drinkers?</u> *Drug Alcohol Depend*. 2013;132(1-2):74-80. PMCID: PMC3726566

Urada LA, Raj A, Cheng DM, Quinn E, Bridden C, Blokhina EA, Krupitsky E, Samet JH. <u>History of intimate partner violence is associated with sex work but not sexually transmitted infection among HIV-positive female drinkers in Russia.</u> *Int J STD AIDS*. 2013;24(4):287-292. PMCID: PMC3752703

Woolf-King S, Steinmaus C, Reingold A, Hahn JA. <u>An update on alcohol use and risk of HIV infection in sub-</u>Saharan Africa: Meta-analysis and future research directions. *Int J Alcohol Drug Res.* 2013;2(1):99-110.

Blood E, Cheng DM. <u>Non-linear mixed models in the analysis of mediated longitudinal data with binary outcomes</u>. *BMC Med Res Methodol*. 2012;12:5. PMCID: PMC3353200

Pace CA, Lioznov D, Cheng DM, Wakeman SE, Raj A, Walley AY, Coleman SM, Bridden C, Krupitsky E, Samet JH. <u>Sexually transmitted infections among HIV-infected heavy drinkers in St. Petersburg, Russia</u>. *Int J STD AIDS*. 2012;23(12):853-858. PMCID: PMC3641790

Tsui JI, Cheng DM, Libman H, Bridden C, Samet JH. <u>Hepatitis C virus infection is associated with painful symptoms in HIV-infected adults</u>. *AIDS Care*. 2012;24(7):820-827. PMCID: PMC3370099



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

The International Uganda Russia Boston Alcohol Network for Alcohol Research Collaboration on HIV/AIDS (URBAN ARCH) Center (P01AA029541; Jeffrey H. Samet, PI; 2021–2026) aims to to examine the role of alcohol use on new TB acquisition, occurrence of active TB disease after TB preventive therapy (TPT), and post-TB lung disease among people with HIV (PWH).



TRAC Project
TB Risk by Alcohol Consumption
Project Lead: Judith Hahn
(UCSF)

The TRAC project aims to assess alcohol use, confounders, and mediators, through self-report and biomarkers, among people with new TB infection in Uganda. The TRAC study aims to estimate the risk ratio for high-risk alcohol use versus lower-risk or no alcohol use on acquiring new TB infection among PWH with prior negative TST results, examine potential mediators of the relationship between level of alcohol use and acquiring new TB infection, and determine the incidence of TB disease among PWH with prior latent TB infection, who received TPT, by level of alcohol use.



Site PI: Winnie Muyindike (MUST)



Administrative Coordinating (Admin) Core

Core Director: Jeffrey Samet (BMC)
The Admin Core ensures that the scientific and programmatic goals of the Center are achieved with high quality and timeliness. The Admin Core oversees the data and sample repository, coordinates the training & mentoring program, and encourages collaboration with investigators within and outside the Center.



Biostatistics and Data Management (BDM) Core

Core Director: Debbie Cheng (BUSPH)

The BDM Core provides statistical collaboration in the design and analysis of each project and develops and maintains an integrated, centralized data management system used by both projects within the Center.



SPIRIT Project
St Peter HIV Infection Respiratory
Impairment & Tuberculosis
Project Lead: Kaku So-Armah
(BUSM)

The SPIRIT prospective, observational, longitudinal study aims to 1) determine the relationship between hazardous alcohol use and post-TB lung disease in PWH in St. Petersburg, Russia; 2) assess whether heavy drinking is associated with post-TB lung disease progression over time; and 3) explore whether smoking modifies the association of heavy drinking and post-TB lung disease. The study will also qualitatively examine barriers to, facilitators of, and readiness to engage in alcohol and smoking interventions in this population.



Site PI: Evgeny Krupitsky (PSMU)









The Boston ARCH Comorbidity Center was funded by the NIAAA to extend the decade of work of the URBAN ARCH Boston Cohort. The overall aims of the Center, called ARCHER, which stands for Addressing Related Comorbidities for HIV by Employing Remote technologies, are twofold:

- 1. To conduct e-health clinical trials research on scalable approaches to address the HIV-associated conditions chronic
- Addressing Related Comorbidities for HIV by Employing Remote technologies
- pain and physical inactivity in people living with HIV with unhealthy alcohol use.
- 2. To support secondary analyses of the existing URBAN ARCH Boston Cohort and provide support and mentoring to trainees and investigators accessing these cohort data.





Administrative Core (AC) Lead: Michael Stein (BU SPH) Administrative Director: Kara Magane (BU SPH)

The AC will coordinate both ARCHER clinical trials, and lead cross-component efforts, assuring quality and efficiency. The AC is currently working closely with the investigators leading the other components to develop strategies and approaches for overcoming unique challenges associated with implementing e-health clinical trials entirely remotely in this hard-to-reach population of people living with HIV and unhealthy alcohol use.



### **Biostatistics and Data Management** Core (BDM)

Lead: Tim Heeren (BU SPH)

The BDM core will provide comprehensive data management and statistical support for the two ARCHER clinical trials focusing on alcohol use, pain, and physical activity in persons living with HIV. The BDM core will also provide support for secondary analyses of the existing URBAN ARCH Boston Cohort and provide support and mentoring to trainees and investigators accessing the cohort.



### Integrated telehealth intervention to reduce chronic pain and unhealthy drinking among people living with HIV

Project Lead: Tibor Palfai (BU)

The chronic pain trial component of ARCHER aims to manage pain and reduce unhealthy drinking among people living with HIV using an integrated telehealth intervention based on cognitivebehavioral and motivational approaches to pain management and alcohol use. The main objective of the RCT is to test the efficacy of this intervention in a national sample of people living with HIV and unhealthy alcohol use. Ecological Momentary Assessment will provide insight into potential mediators of the intervention as well as a more precise understanding of how alcohol and pain influence one another and physical function.





Increasing physical activity among persons living with HIV engaged in unhealthy drinking Project Leads: Ana M. Abrantes (Butler Hospital) and Lisa Quintiliani (BU SPH)

The physical activity trial component of ARCHER aims to test the efficacy of a 12-week lifestyle physical activity+Fitbit intervention among lowactive people living with HIV engaged in unhealthy drinking. The trial will study changes in drinking. physical activity, physical functioning, and mental health outcomes. The primary aims are to decrease unhealthy drinking and increase physical activity. Secondary and tertiary aims include decreased negative affect and sedentary behavior, as well as increases in physical/mental functioning and adaptive coping and examining the mechanisms affecting those relationships using Ecological Momentary Assessment.













The Microbiome, Metabolites, and Alcohol in HIV to Reduce CVD (META HIV CVD) program project grant investigates alcohol-associated gut dysbiosis and gut dysbiotic metabolites as cardiovascular disease risk factors among people living with HIV infection (PLWH) who are heavy drinkers. The goals of this research are (1) to determine if a tailored probiotic can mitigate alcohol-associated gut dysbiosis and lower levels of microbial translocation, inflammation, and improve harmful dysbiotic metabolite profiles and (2) to determine if these metabolites are associated with incident CVD and death among PLWH.

### **Project 1**

Among people living with HIV, heavy drinking increases the risk of heart disease and death. Studies suggest that alcohol changes the number and kind of bacteria in your gut and these changes increase the risk of heart disease and death. This randomized controlled trial will determine whether a pill containing healthy gut bacteria can increase the number of good bacteria in the gut, lower levels of inflammation, and lower the risk of heart disease and death.

### **Project 2**

2

4

The overarching theme for this project is that alcohol alters the bacteria in the gut and metabolites that the gut bacteria make among people who are infected with HIV infection and are heavy drinkers. We will examine whether this change in the bacteria and the metabolites can be reduced by taking a probiotic supplement and whether metabolites are associated with future cardiovascular disease events (e.g., a heart attack) or death.

### **Admin Core**

The Admin Core provides administrative oversight of the program, including assembling a steering committee, program advisory committee, and data safety monitoring board. The core develops the policies and procedures necessary to successfully meet training initiatives, as well as services to program investigators and trainees. This is done by providing resources (e.g., data and specimens), biostatistical support, and mentorship to new investigators and promote synergy within and across other funded project program grants and assist investigators with challenges (e.g., recruitment).

### **Lab Core**

The Integrated Metagenomics and Metabolomics Core (IMMC, or the lab core) provides a platform that interconnects and supports the analytical needs of Projects 1 and 2. Specifically, IMMC contributes high-quality data on gut bacteria and their metabolites and supports the assessment of the efficacy of the probiotics supplementation in improving clinical outcomes in PLWH with heavy alcohol drinking.



### ALCOHOL, GUT-DYSBIOSIS, INFLAMMATION, AND NON-AIDS DISEASES AMONG PEOPLE WITH HIV

9:00 AM - 3:00 PM, Saturday, June 25, Orlando, Florida, USA

Organizers:

Matthew Freiberg M.Sc., M.D.

matthew.s.freiberg@vumc.org

Shirish Barve Ph.D.

shirish.barve@louisville.edu

Kaku So-Armah, Ph.D.

kaku@bu.edu

This satellite will address the following: The role of the gut microbiome among people with HIV who consume alcohol.

Participants will learn about the relationship between alcohol intake and gut dysbiosis among people with HIV. We will examine how alcohol impacts the gut microbiome and how gut dysbiosis in this population is associated with biomarkers of inflammation and gut derived metabolite profiles including trimethylamine N oxide (TMAO) from the peripheral circulation. Additional studies will examine gut dysbiosis as it relates to the alcohol associated syndemic (i.e., heavy drinking, smoking, and depression), neurocognitive changes, and liver disease among people living with HIV.

Participation in this symposium is free of charge but will be limited to the first 50 registrants. The detailed program schedule is provided below. If you would like additional information or have questions regarding the symposium, please contact **Emily Smith** at: <a href="mailto:emily.k.smith@vumc.org">emily.k.smith@vumc.org</a>.

Please register to attend by May 1, 2022: https://redcap.link/METAHIVCVDRSA

#### 9:00 - NIAAA Welcome

Kendall Bryant, PhD

Director, Alcohol and AIDS Research, National Institute on Alcohol Abuse and Alcoholism

#### 9:15 – Alcohol and the Gut Microbiome in People with HIV: An Overview

Matthew Freiberg, MD MSc

Professor of Medicine, Dorothy and Laurence Grossman Chair in Cardiology, Division of Cardiovascular Medicine, Vanderbilt University Medical Center

### 9:30 – Salient Pathogenic Features of Gut Microbial Dysbiosis in People Living with HIV (PLWH) with Hazardous Drinking

Shirish Barve, PhD

Professor of Medicine, Distinguished Scholar, Division of Gastroenterology, Hepatology, and Nutrition, University of Louisville

### 10:00 – Gut-Dysbiosis and Gut-Derived Metabolites in People Living with HIV (PLWH) with Hazardous Drinking

Smita Ghare, PhD

Assistant Professor of Medicine, Division of Gastroenterology, Hepatology, and Nutrition, University of Louisville

#### 10:30 - Coffee break

### 10:45 - The association between heavy alcohol consumption and trimethylamine-n-oxide in people living with HIV in St Petersburg Russia

Kaku So-Armah, PhD

Research Assistant Professor, Clinical Addiction Research and Education (CARE) Unit, Boston University School of Medicine

### 11:15 - Does Trimethylamine-n-oxide contribute to echocardiographic features of alcohol-related heart failure in people with HIV?

Samuel Mensah, MD

Research Coordinator, Clinical Addiction Research and Education (CARE) Unit, Boston University School of Medicine

#### 11:45 - Behavioral Health Syndemics and the Gut Microbiome Among People Living with HIV

Natalie Chichetto, PhD, MSW

Assistant Professor, Department of Epidemiology, University of Florida

### 12:00 - Lunch Break

### 12:45 – HIV and Alcohol Associated Reductions in Butyrate are Associated With Reduced Neural Metabolites and Poorer Cognition

Vaughn Bryant, PhD, ScM

Department of Pharmacology C-236, University of Colorado Health Sciences Center, Denver, CO, USA

### 1:15 - Defining the Pathogenesis of HIV-Associated NAFLD

Curtis Gabriel, MD PhD

Instructor, Division of Gastroenterology, Hepatology, and Nutrition, Vanderbilt University Medical Center

### 1:45 - Panel Discussion

Moderated by Shirish Barve

#### 2:45 - Closing

# INTER-CFAR SUBSTANCE USE RESEARCH COMMUNITY(I-SURC)

# INTERESTED IN HIV AND SUBSTANCE USE RESEARCH?

The I-SURC provides the platform for substance use researchers within CFARs nationwide to foster the exchange of ideas and develop collaborations, share information and training, as well as disseminate plans and progress at the intersection of HIV and substance use research.

## SCAN THE QR CODE OR VISIT US AT THE BELOW LINK TO LEARN MORE

cfar.med.brown.edu/community/i-surc



MEMBERSHIP IS AVAILABLE TO ALL INVESTIGATORS AT CFAR INSTITUTIONS



