PROVIDENCE / BOSTON CENTER FOR AIDS RESEARCH Lifespan • Brown • Boston University • Boston Medical Center



Newsletter - Winter 2021

Upcoming
Programs and
Events



FEBRUARY 1, 2021

Spring 2021 Developmental Grant Applications Due

- Letter of Intent due: 2/1/2021 (by 5:00pm EST)
- Notification of selected LOIs: 2/8/2021
- Full applications due: 4/1/2021

MARCH 1, 2021

CFAR Summer Internship Program

 If you are interested in hosting a student for Summer 2021, please complete an on-line <u>Summer Student Request form</u> and submit

MARCH 7, 2021

CFAR K-Award Workshop Sign Up Deadline

• Session begins May 7, 2021

Register Here

MAY 14, 2021 (SAVE THE DATE)

CFAR Annual Research Forum

This will be a virtual event

CFAR Leadership Corner Preparing for the Next Five Years

Susan Cu-Uvin, MD - Director of the Providence/Boston CFAR

The Providence/Boston CFAR is currently preparing for our fifth renewal application to NIH. As changes in NIH priorities are made and new initiatives are announced, we need to ensure that our CFAR is evolving with the current HIV related research. We are asking for feedback from both current and potential users through an on-line assessment tool. This survey provides an opportunity for all investigators to evaluate the services and faculty development programs currently available and suggest additional services and programs that may be offered for our next 5-year cycle. The Substance Use Research Core (SURC) was originally developed through this process in our last renewal application submitted in 2017 (see Highlighted Core in this newsletter). In addition to CFAR services and programs, we are interested in identifying and developing new CFAR Research Interest Groups (RIGs) that will allow for new areas in HIV to be fully developed with the initial goal of increasing grants in this area of interest. We hope that you will take a few minutes to complete the on-line needs assessment (here) so that we may continue to offer services and faculty development programs that help you accomplish your research and academic goals.

Click <u>here</u> for NIH Funding Opportunities from CFAR Co-Funding Institutes and Centers



PROVIDENCE / BOSTON CENTER FOR AIDS RESEARCH Lifespan & Brown & Boston University & Boston Medical Contar



The CFAR's Newest Member: Meet the Biorad QX200 Droplet Digital PCR System

Jeffrey Kuniholm - PhD Candidate, Henderson Lab

A state-of-the-art Biorad QX200 Droplet Digital PCR System was recently purchased by the Prov/Bos CFAR Basic Science core with



funds awarded by NIH through the CFAR supplement for equipment. Droplet digital PCR (ddPCR) is a sensitive technique which leverages the use of microfluidics and PCR sample partitioning to precisely quantify low frequency RNA and DNA species. This technology will be particularly useful for translational projects which aim to detect, quantify, and characterize DNA and RNA

from patient samples and tissues where molecular detection can be particularly challenging. In the context of HIV, ddPCR is emerging as a state-of-the-art method for HIV provirus reservoir detection and has been employed in publications which detected latent HIV infection in patients on antiretroviral therapy (ART). Beyond latent provirus detection, ddPCR allows for the discrimination of intact and non-intact HIV provirus species in a quantitative manner. This platform is flexible and amenable to testing highly customizable primer and probe sequences which aim to quantify diverse sequences of interest. Accordingly, this technology has been leveraged during the SARS-CoV-2 pandemic to detect viral transcripts from patient samples with high sensitivity and relatively low sample input. The system includes an automated droplet generator and droplet reader, making its use relatively hands-free with the ability to run 96 samples at a time.

If interested in using ddPCR technology contact the Basic Science Core.

Congratulations to our Developmental Grant Fall 2020 Awardees!



Allegra Gordon, ScD, MPH



Tara Bouton, MD,



Alana Brennan, PhD, MPH



Leonardo Martinez, PhD, MPH



PROVIDENCE / BOSTON CENTER FOR AIDS RESEARCH Lifespan • Brown • Boston University • Boston Medical Center

Substance Use Research Core (SURC) Highlight

The Providence/Boston Center for AIDS Research Substance Use Research Core (CFAR SURC) is the only CFAR Core in the nation that focuses specifically on the intersection of substance use and HIV. The SURC is composed of 16 faculty members, who are leaders in the field of substance



use and HIV research, and is led by co-Directors Christopher Kahler, PhD (Brown University) and Karsten Lunze, MD, MPH, DrPH (Boston University). The core offers expertise on methods needed to conduct effective substance use and HIV research. Since its inception in 2018, the SURC has provided services to 107 investigators and supported 50 funded grant submissions. In the last 6 months, the SURC has been working to expand its reach and facilitate collaboration between researchers at the Providence/Boston CFAR as well as CFARs around the country.

The SURC has developed two key resources that are available to the research community via the Providence/Boston CFAR Website:

- •An <u>Assessment Library</u> containing detailed information on tools for evaluating substance use, including recommendations from SURC faculty.
- •A <u>Substance Use and HIV Terminology Guide</u> on preferred substance use-related language for use in grant applications and publications.

For the complete highlight on the CFAR SURC, please click here.

C-CERC Corner

Transitions of Care for People Living With HIV/AIDS: Are We Ready for the Graying of the HIV Epidemic?



Paul B. Goulet, Chair, Providence/Boston CFAR-CCERC, Patient Engagement Consultant

The good news is that people with HIV are living much longer than they used to; it's estimated that by 2020, 70 percent of people living with HIV in the United States will be age 50 and older, compared to 10 percent during the first 20 years of the epidemic (www.cdc.gov/olderamericans). The bad news? With this longevity come challenges that

our healthcare system isn't prepared to address. One the top challenge that the healthcare system needs to address is transitional care for people living with HIV/AIDS. Transitional care has been defined as a set of actions designed to ensure the coordination and continuity of health care as patients living with HIV transfer between different locations or different levels of care in the same location or enter into geriatric care including nursing home, and or assisted living care.

For the complete article on the CFAR C-CERC please click <u>here</u>.



