

# Third Coast Center for AIDS Research 2023 Symposium

# Chicago Researchers Advancing HIV Science

October 16, 2023

Northwestern Medicine Prentice Women's Hospital



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#### Welcome

The Third Coast Center for AIDS Research is thrilled to welcome you all to the 2023 CFAR Symposium in Chicago!

Research led by Chicago-based investigators has contributed to critical advancements across all disciplines of HIV science. These major advancements in HIV research requires collaboration across all disciplines, as well as with health departments and community partners. To that end, the symposium will be an opportunity—the first since the COVID-19 pandemic began—for local faculty to present and discuss progress in their collaborative HIV research and to identify opportunities for increased synergy between our institutions in the coming years.

The agenda and other information about this meeting are available at: <a href="mailto:thirdcoastcfar.org/third-coast-cfar-2023-symposium">thirdcoastcfar.org/third-coast-cfar-2023-symposium</a>.

We invite users of X, formally known as Twitter, to share your experiences at the symposium with your local institutions and broader professional networks. Please tag or follow <u>@ThirdCoastCFAR</u>.

Thank you for your participation. We look forward to an excellent symposium! Sincerely,

#### The 2023 CFAR Symposium Planning Committee

**Lena Al-Harthi, PhD** *RUSH University* 

Russell Brewer, DrPH University of Chicago

Richard D'Aquila, MD Northwestern University

**Geri Donenberg, PhD**University of Illinois at Chicago

**Sybil Hosek, PhD** *University of Illinois at Chicago* 

**Xiu-Ti Hu, MD, PhD** *RUSH University*  Ramon Lorenzo Redondo, PhD Northwestern University

**Elena Martinelli, PhD** *Northwestern University* 

**Brian Mustanski, PhD** *Northwestern University* 

Michael Newcomb, PhD Northwestern University

**Richard Novak, MD** *University of Illinois at Chicago* 

**Jessica Ridgway, MD** University of Chicago

# Acknowledgements

Support for this symposium was provided by the Third Coast Center for AIDS Research (P30 AI117943). The national network of Centers for AIDS Research (CFAR) is cofunded by NIAID, NCI, NICHD, NHLBI, NIDA, NIA, NIDDK, NIGMS, NIMH, NIMHD, NINR, and NIDCR, with scientific management from the NIH Office of AIDS Research and the Fogarty International Center. The Symposium Planning Committee would like to thank the Office of the Dean of Northwestern University Feinberg School of Medicine and the Office of the Dean of the Biological Sciences Division at the University of Chicago for their generous institutional support for this symposium and the Third Coast CFAR.

#### **About the Third Coast CFAR**

"Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work."

Daniel Hudson Burnham (1846-1912)

## **Background**

Like the transformational Chicago architect, Daniel Burnham, the Third Coast Center for AIDS Research (CFAR) has a grand vision – to end the HIV epidemic, with Chicago as a national model for high-impact research collaborations. Third Coast CFAR partners include Northwestern University and the University of Chicago, the Chicago and Illinois Departments of Public Health, and key community organizations, including Howard Brown Health, AIDS Foundation of Chicago, Center on Halsted, AllianceChicago, and many others.

#### **Our Mission**

To catalyze cross-institutional and cross-disciplinary HIV research that will end the HIV epidemic.



#### **Third Coast CFAR Core Services**

The Third Coast CFAR's Scientific Cores provide services to enhance ongoing HIV research and to support the development of new grant applications. Initial consultation is offered free of charge. A research navigator will help CFAR users identify funding for core services, when applicable.

#### Behavioral, Social, and Implementation Sciences (BSIS) Core

- Biostatistical consultation and analysis
- Data analysis
- Implementation science training and consultation
- Custom maps with Geographic Information Systems (GIS)
- Participant recruitment services
- Selection or development of social, behavioral, and person-reported outcomes measures

#### **Viral Pathogenesis Core**

- Custom assays for pro-inflammatory biomarkers
- Access to laboratory infrastructure, including BSL2+ facility and OMX microscopic imaging
- Development of study-specific experimentation methods
- HIV technician services
- Consultation in referral to specialized facilities for -omics research
- p24 Assays

#### **Clinical Sciences Core**

- Consultation for clinical research operations and project development
- IRB and regulatory consultation and navigation
- Clinic and provider-based study participant recruitment
- Procurement and processing of biological specimens, including mucosal cells and tissue, and access to banked plasma and cryopreserved cells
- Electronic Medical Record (EMR) data customized for HIV research
- Biostatistical consultation and analysis
- Data analysis

For more information about our core services, please visit <u>Find a CFAR Service</u> on the CFAR website or contact <u>cfar@northwestern.edu</u>.

#### **Third Coast CFAR Awards**

The Third Coast Center for AIDS Research <u>Development Core</u> aims to advance a robust HIV research agenda by investing in CFAR members and institutions. The Core provides funding to early career investigators, established investigators new to HIV research, and community partners.

#### **Pilot Awards**

<u>Pilot awards</u> are intended for key preliminary studies that will enable new NIH grant submissions. Third Coast CFAR faculty members who have not yet led an Ro1 or equivalent NIH grant for HIV research are eligible. The Developmental Core has funded <u>47 high-impact pilot projects</u> between 2015 and 2023.

#### **CFAR Administrative Supplements**

Periodically, NIH releases a limited call for <u>short-term projects that are funded via supplement</u> to the NIH P30 center grant that supports the Third Coast CFAR. Topics are chosen to address emerging issues or areas of research and are administratively reviewed at NIH.

#### **Ending the HIV Epidemic Supplements**

To support the federal Ending the HIV Epidemic (EHE) initiative, NIH offers supplemental funds through the CFAR P30 grant for implementation research led by faculty and community- or health department-based partners. <a href="Projects">Projects</a> are typically one to two years.

## **Community Mini-Awards**

The Third Coast CFAR supports dissemination of HIV research and engagement between community members and investigators through <u>Community Mini-Awards</u>. Applicants often propose integrating opportunities for engagement through CFAR participation in events that include space for co-sponsors.

### **Community Collaborative Awards**

The Third Coast CFAR's <u>Community Collaborative Awards</u> are intended to support the exploration or development of new partnerships between community organizations and CFAR faculty members. Proposals focus on the development of academic-community partnerships that can lead to high priority HIV research projects in the future.

#### **Third Coast CFAR Awards**

#### **K12 Career Development Program**

The Third Coast CFAR's HIV-related Cardiovascular and Sleep Disorders <u>K12 Career Development Program</u> is a collaboration between the University of Chicago and Northwestern University (K12 HL143959; MPIs Schneider and Ardehali). Between 2018 and 2023, the program provided an interdisciplinary pathway to academic productivity to five early stage investigators. Scholars pursued training through the CFAR and local Clinical and Translational Science Awards and developed research projects that address HIV comorbidities.

#### **Ending the HIV Epidemic Planning Awards**

Between 2019 and 2021, the Developmental Core selected teams of EHE SWG members to develop science-practice partnerships that were supported by short-term EHE Planning Awards. The goal of this program was to pre-position EHE SWG members for future EHE funding opportunities. Seven teams successfully competed for NIH or CFAR EHE funding within two years of their planning award.

#### **Basic Science Collaborative Innovation Awards**

Following the 2021 CFAR symposium, the Developmental Core issued awards to new teams of basic scientists exploring high risk, high reward HIV research. Two teams have already successfully competed for longer-term NIH or CFAR funding to further pursue their work.

To learn more about CFAR funding, please visit: thirdcoastcfar.org/developmental-core.

# **Symposium Logistics**

#### Location

We are excited to host the symposium at the <u>Northwestern Medicine Prentice Women's Hospital</u>, 3<sup>rd</sup> floor conference center, located at 250 East Superior Street, Chicago, IL 60611.

#### **Transportation**

The closest bus stop to Prentice Women's Hospital is <u>Fairbanks and Superior</u>, route 157. The closest train station is the Chicago station red line, located at <u>800 N State St</u>. Please see the <u>CTA website</u> for transit routes and instructions to purchase a fare card if you don't have one already.

#### Registration

Attendees will pick up their name badge and program book at the CFAR registration table near the Prentice Harris Family Atrium on the 3<sup>rd</sup> floor conference center.

#### **Sessions and Lunch**

All symposium sessions will take place at Prentice Women's Hospital, 3<sup>rd</sup> floor conference center in Room L and the Prentice Harris Family Atrium. Please enter the building at 250 East Superior Street and take the elevators to the 3<sup>rd</sup> floor conference center. Lunch will be available at 12:30 p.m. in the Atrium.

## **Poster Session and Reception**

The symposium will include a poster session and reception at 4:10 p.m. The poster session and reception with wine, beer, and hors d'oeuvres will be held in the Prentice Harris Family Atrium at 250 East Superior Street.

## **Parking**

For symposium attendees, parking will be validated for Northwestern University's <u>Huron-Superior Garage at 222 East Huron Street</u>. Request a parking validation ticket at the CFAR registration table. The parking validation ticket will not work for validation in other lots.

## 2023 CFAR Symposium Agenda

9:45 AM Registration

10:00 AM Poster Set-up Completed

10:30 AM Welcome
Brian Mustanski, PhD, Northwestern University

# 10:40 AM Opening Session: Cross-disciplinary Updates on Recent Advancements in HIV Research

Chair: Michael Newcomb, PhD, Northwestern University

**Basic Science** 

Lena Al-Harthi, PhD, RUSH University

Clinical Sciences and Biomedical Interventions Jessica Ridgway, MD, University of Chicago

**Behavioral Science** 

Amy Johnson, PhD, Lurie Children's/Northwestern University

Public Health Priorities and Opportunities for Research Dave Kern, Chicago Department of Public Health

# 11:25 AM Session 1: Understanding and Addressing HIV Comorbidities

Chair: Richard Novak, MD, University of Illinois at Chicago

Skeletal Responses to HIV and Antiretrovirals Ryan Ross, PhD, RUSH University

Biological Basis of HIV-Associated Cardiovascular Diseases Matthew Feinstein, MD, Northwestern University

HIV-Associated Cardiometabolic Comorbidities: Getting to the Heart of the Matter

Jennifer Jao, MD, MPH, Lurie Children's/Northwestern University

The Role of the Brain's Central Executive Network in Comorbidities of HIV

Joshua Schrock, PhD, Northwestern University

## 2023 CFAR Symposium Agenda

#### **12:30 PM** Lunch

# 1:15 PM Session 2: Accelerating the HIV Prevention and Care Continuums

Chair: Sybil Hosek, PhD, University of Illinois at Chicago

Development and Dissemination of PrEP4Teens: A Social Marketing Campaign to Raise PrEP Awareness and Knowledge Among Chicago Area Adolescents

Kathryn Macapagal, PhD, Northwestern University

Considering Structural Factors in HIV: Perspectives on the Legal Context of Employment for Men Darnell Motley, PhD, University of Chicago

Persistent HIV Viral Suppression During Treatment Interruption in the CDC HIV Outpatient Study

Richard Novak, MD, University of Illinois at Chicago

#### 2:15 PM Break

# 2:30 PM Session 3: From Development to Application – Innovations in Methods and Models

Chair: Elena Martinelli, PhD, Northwestern University

Using Humanized Mice to Study the Dynamics of HIV Infection and Antiretroviral Therapy

Jennillee Wallace, PhD, RUSH University

Generation of Microglia-Containing Organoids and Cyclic Multiplex Immunofluorescence for HIV Infection Studies João Mamede, PhD, RUSH University

Glycoengineering Anti-HIV Antibodies to Increase Delivery to the Brain: Implications for Targeting the CNS HIV Reservoir Jeffrey Schneider, PhD, RUSH University

Characterization of the Transcriptional Microenvironment of the SIV Tissue Reservoirs at the Single Focus Level During ART and Post ATI Ramon Lorenzo Redondo, PhD, Northwestern University

# 2023 CFAR Symposium Agenda

3:20 PM	in Method and Models Chair: Héctor Torres, PsyD, Colibrí Counseling
	Understanding Status Neutral Approaches for Same Day Initiation of Antiretroviral Therapy in Community Health Settings Moira McNulty, MD, University of Chicago
	Capacity building and status neutral approaches to Ending the HIV Epidemic Russell Brewer, DrPH, University of Chicago
	Moving from Community Engagement to Empowerment: Strategies from the PrEPárate Campaign Harita Shah, MD, University of Chicago
4:00 PM	Invitation to Poster Session John Schneider, MD, MPH, University of Chicago
4:05 PM	Closing Remarks Richard D'Aquila, MD, Northwestern University
4:10 PM	Poster Session and Reception
6:00 PM	Symposium Concludes