## HIV and Aging in the Era of ART and COVID-19

Suresh Pallikkuth, PhD<sup>a,b</sup> and Savita Pahwa, MD<sup>a,b</sup>

**Abstract:** Our understanding of HIV/AIDS has been reframed during the recent past because the use of novel antiretroviral therapy has enabled clinicians and patients to control the progression of the disease. This supplement provides an overview of the HIV and Aging in the Era of ART and COVID-19, a virtual symposium held on February 8–9, 2021, organized by the Miami Center for AIDS Research along with articles contributed by some of the speakers and members of the organizing committee and presentations by junior investigators.

Key Words: HIV and aging, HIV and COVID19, aging and immunity

(J Acquir Immune Defic Syndr 2022;89:S1–S2)

Our understanding of HIV/AIDS has been reframed during the recent past because the use of novel antiretroviral therapy (ART) has enabled clinicians and patients to control the progression of the disease. As a consequence, the number of older people living with HIV (PLWH) has grown dramatically. Indeed, between 2005 and 2012, the percentage of HIV-infected Americans older than 50 years jumped from 29% to 42%, and, even more impressively, the rate has continued to increase: today, nearly 70% fall into this age cohort. These epidemiological changes underscore the need for a better understanding of the relationship between aging and HIV. The COVID-19 pandemic starting in January of 2020 has had a significant impact on PLWH. This is especially important for those aging with HIV given the more significant clinical impact in older individuals.

Seeking to expand the purview of medical research into the nexus between HIV and aging, this 2-day virtual symposium explored a range of topics not typically addressed in conferences devoted to these conditions. Focusing on the translational scientific research implicated in the pathogenesis and pathophysiology of HIV and its presentation in older individuals, the presenters addressed 3 areas of increasing investigational interest and concern:

From the <sup>a</sup>Department of Microbiology and Immunology, University of Miami Miller School of Medicine, Miami, FL; and <sup>b</sup>Miami Center for AIDS Research, University of Miami Miller School of Medicine, Miami, FL. Supported by funding received from National Institutes of Health Grant: P30 AI073961.

Presented at the HIV & Aging in the era of ART and COVID19, an Inter-CFAR Virtual Symposium; February 8, 9 2021; Miami, FL.

The authors have no conflicts of interest to disclose.

S. Pallikkuth and S. Pahwa contributed equally to the work.

Correspondence to: Suresh Pallikkuth, PhD or Savita Pahwa, MD, Miami CFAR HIV and Aging Scientific Working Group, University of Miami Miller School of Medicine, 1580 NW 10th Avenue, Miami, FL 33136 (e-mail: spallikkuth@med.miami.edu or spahwa@med.miami.edu).

Copyright © 2022 Wolters Kluwer Health, Inc. All rights reserved.

- Basic science of inflammation, metabolism, and epigenetics in aging and defining the effect of HIV
- Geroscience and senolytics and the potential for clinical trials in aging PLWH
- COVID-19 research in aging and chronic diseases and delineating its impact on aging PLWH

In addition, the symposium had poster presentations relevant to the main theme. The Miami CFAR mentoring team conducted a mentoring session for junior investigators to offer advice on the path to independence. The symposium also had a dedicated community session led by 5 nationally renowned community advocates discussing the community perspective related to the issue of aging and HIV and the need for basic science research to address the issues of inflammation and frailty in aging HIV population. This Supplement provides an overview of the symposium and articles contributed by some of the speakers and members of the organizing committee and presentations by junior investigators.

## **ACKNOWLEDGMENTS**

HIV and Aging in the Era of ART and COVID-19 was a virtual symposium held on February 8-9, 2021, and organized by the Miami Centers for AIDS Research (Miami-CFAR) at the University of Miami through a National Institutes of Health (NIH) administrative supplement to the Miami CFAR (P30AI073961). Symposium cochairs were Savita Pahwa, MD (University of Miami), and Suresh Pallikkuth, PhD (University of Miami). The symposium steering committee included national experts in HIV & aging research, Molly Perkins, PhD, and Marcia Holstad, PhD (Inter CFAR HIV& Aging Scientific Working Group from Emory University), Alan Landay, PhD (Rush University), and Monty Montano, PhD (Harvard Medical School). Invited speakers were Steven Deeks, MD (University of California, San Francisco); Cornelia M. Weyand, MD, PhD (Stanford University); Heidi M. Crane, MD, MPH (University of Washington); Michael S. Saag, MD (University of Alabama); Laura Niedernhofer, MD, PhD (University of Minnesota); George Kuchel, MD, CM, FRCP (University of Connecticut); Jean-Pierre Routy, MD, FRCPC (McGill University); Davey Smith, MD, (University of California, San Diego); Galit Alter, PhD (Harvard University); and Giovanni Guaraldi, MD (University of Modena and Reggio Emilia). Selected oral abstracts were presented by Lesley De Armas, PhD (University of Miami); Bertrand Ebner, MD (University of Miami); Smita Ghare, PhD, MSc (University of Louisville); and Stefano Rinaldi, PhD (University of Miami). Posters selected were from University of Miami (Shuanglin Hao, MD, PhD and Roger McIntosh, PhD), University of Florida (Seungjun

www.jaids.com | S1

Ahn, PhD), University of Central Florida (Shiridhar, PhD), Yale School of Medicine (Lauren Smith, PhD), TeleMed2U (Javeed Siddiqui, MD, MPH), and McGill University Health Centre (Stéphane Isnard, PhD). The Miami CFAR mentoring team consisted of Adam Carrico, PhD, Maria Alcaide, MD, and Enrique Mesri, PhD; they conducted the mentoring session associated with the symposium.

## **REFERENCES**

- American Psychological Association. National HIVAIDS and Aging Awareness Day. Washington, DC; 2021. Available at: https://www. apa.org/pi/aids/resources/aging-awareness. Accessed August 14, 2021.
- Centers for Disease Control and Prevention. HIV and Older Americans. Atlanta, GA; 2021. Available at: https://www.cdc.gov/hiv/group/age/olderamericans/index. html. Accessed August 14, 2021.