

Quick Reference

HIV and Aging Efforts Among NIH Institutes, Centers, and Offices (ICOs)

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NIH ICO	Research Areas within HIV and Aging
National Cancer Institute (NCI)	<ul style="list-style-type: none">• Interplay between chronic HIV infection and aging and other factors on the risk, spectrum, and biology of cancer• Evolving epidemiology of cancer development in the aging population of people living with HIV• Optimal screening and treatment of cancer in elderly PWH• Impact of chronic inflammation and metabolic dysregulation on cancer development in PWH• Interplay between age-related and HIV-related immune perturbations in the development of cancer, cancer treatment, and cancer outcomes in PWH and cancer• Survivorship and other quality of life indicators of cancer health in PWH• Role of accelerated aging among PWH and identification of biomarkers of cancer risk• Interplay between aging, chronic HIV infection, and cancer in frailty and mobility disorders among PWH• Equitable receipt of cancer survivorship care among PWH
National Heart, Lung, and Blood Institute (NHLBI)	<ul style="list-style-type: none">• Elucidating the impact/mechanisms of HIV-accelerated progression of heart, lung, blood, and sleep-related (HLBS) diseases in PWH including, but not limited to, endothelial dysfunction, atherosclerosis, cardiac dysfunction, chronic obstructive pulmonary disease (COPD), HIV-associated pulmonary hypertension, pulmonary fibrosis, coagulation abnormalities, disordered sleep and sleep-disordered breathing• Addressing health disparities related to the manifestations of HLBS comorbidities in PWH• Identifying biomarkers and/or cellular changes that can predict more severe HLBS complications as PWH age• Examining factors including socioeconomic, care, and genomics that are associated with HLBS comorbidities related to accentuated or slowed aging in PWH• Evaluating the impact of changes in preventive or care activities, including access to care, on HLBS comorbidities experienced by people aging with HIV• Implementation research to improve the care and management of HIV-associated HLBS comorbidities in PWH
National Institute on Aging (NIA)	<ul style="list-style-type: none">• Healthy aging among older adults with HIV• HIV infection and pathogenesis in the context of aging-related genetic, molecular, and cellular changes and physiological outcomes• Molecular mechanisms common to multiple comorbid states with HIV

	<ul style="list-style-type: none"> • Contributions of individual, interpersonal, social, structural, and institutional factors to physical, psychological, and economic well-being of people aging with HIV and to social inequalities and health disparities • Relationships between HIV infection and cognitive decline • Assessment and treatment of older PWH and comorbidities, polypharmacy, disability, or disparities in health outcomes
National Institute of Allergy and Infectious Diseases (NIAID)	<ul style="list-style-type: none"> • HIV infection and related immune function, vaccine responses, and treatment-related comorbidities in aging individuals where the primary focus is not on aging processes • Interactions of aging with HIV-related coinfections • Effects of aging on achieving durable viral suppression
Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)	<ul style="list-style-type: none"> • Reproductive aging among women with HIV • Interaction of reproductive aging and menopause among women with HIV • Alteration of immune responses among women with HIV • HIV prevention for aging women, including behavioral aspects and impact of life-course factors, stigma, stress, social isolation, economic resources • Perinatally-acquired HIV and risk of comorbidities
National Institute of Neurological Disorders and Stroke (NINDS)	<ul style="list-style-type: none"> • The long-term consequences of latent HIV in the CNS as it pertains to the modulation of chronic neuroinflammation and cognitive impairment in aging. • The mechanisms by which chronic HIV exacerbates long-term blood-brain barrier (BBB) damage and cerebrovascular dysfunction, including in the context of stroke and vascular contributions to cognitive impairment and dementia (VCID). • Studies of potential mechanisms by which chronic HIV primes the CNS for neurodegenerative disorders associated with aging, including in the context of AD/ADRD. • Interactions between chronic HIV infection and other neurological disorders and comorbidities within the mission of the NINDS that occur in aging. • The long-term effect of chronic antiretroviral therapy (ART) exposure throughout the lifespan on the central and peripheral nervous systems. • Mechanisms of HIV-associated peripheral neuropathy and neuropathic pain. • Studies that address the question of whether chronic HIV infection and exposure to ART cause accelerated aging and/or senescence in the CNS.
National Center for Complementary and Integrative Health (NCCIH)	<ul style="list-style-type: none"> • Health promotion and restoration, resilience, disease prevention, and symptom management among PWH and people aging with HIV • Clinical and mechanistic studies targeting chronic pain, inflammation, resilience, mental health, and risk reduction
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)	<ul style="list-style-type: none"> • Research to better understand processes and treatment of unhealthy weight gain and obesity, diabetes, liver disease, gastrointestinal dysfunction, kidney, and urological diseases in PWH and people aging with HIV

	<ul style="list-style-type: none"> • Research on social determinants of health including food insecurity and access to nutritious foods, housing insecurity, stigmas, discrimination, racism, homophobia, and transphobia in PWH and management of comorbidities
National Institute on Alcohol Abuse and Alcoholism (NIAAA)	<ul style="list-style-type: none"> • Development and testing of frailty and fracture risk assessment tools in older adults • Co-occurrence of alcohol use and HIV and epigenetic age acceleration • Gut dysbiosis, mitochondrial dysfunction • Cardiovascular, hepatic, and neurological risk in people aging with HIV • Interventions for behavioral health and aging outcomes
National Institute of Dental and Craniofacial Research (NIDCR)	<ul style="list-style-type: none"> • Oral comorbidities, coinfections, and complications • Other comorbidities intertwined with poor oral health in the context of aging, including mental health and neurocognitive disorder • Oral health disparities and their impact on dental and oral health care access • Lack of efficient diagnosis and therapeutics
Fogarty International Center (FIC)	<ul style="list-style-type: none"> • HIV, aging, and non-communicable disease research, training, and capacity building in low- to middle-income countries
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)	<ul style="list-style-type: none"> • Observational, translational, and basic/pre-clinical research on HIV/AIDS-associated comorbidities including systemic rheumatic (reactive arthritis, psoriatic arthritis, septic arthritis), musculoskeletal (pain, muscle diseases, cartilage degeneration, bone diseases and fracture, frailty), and skin disease (dermatological manifestations)
National Institute of Mental Health (NIMH)	<ul style="list-style-type: none"> • Basic, biological, and clinical research, and interventions for HIV- and aging- associated common and serious mental health disorders • Functional and neurocognitive deficits • Implementation factors
National Institute on Drug Abuse (NIDA)	<ul style="list-style-type: none"> • Identifying mechanisms underlying vulnerability or resilience to HIV-related neuropathogenesis or neurocognitive impairment as a function of substance use disorder (SUD) history in aging people with HIV • Leveraging existing epidemiological data to elucidate effects of cannabis use in older adult populations with HIV • Generating multi-omic data as a resource for studying HIV and SUD in aging people with HIV • Long-term HIV infection and substance use outcomes, as well as medical consequences, among aging persons living with HIV in order to enhance healthcare access and utilization • Biomarkers for and mechanisms that contribute to vulnerability to HIV exposure, aggravate HIV pathologies, regulate HIV persistence, or increase the risk for comorbidities including SUD and other poor health outcomes in aging people with HIV • Substance use trajectories; normative and non-normative social/behavioral adult development; and HIV and comorbid outcomes.
National Institute on Minority Health and Health Disparities (NIMHD)	<ul style="list-style-type: none"> • HIV and aging related research on sexual and gender minority populations, stigma, social determinants of health, comorbidities, interventions, prevention

	<ul style="list-style-type: none"> • Multi-level approaches and strategies for HIV prevention, testing, and interventions in high-risk disparity populations, subpopulations, and geographic hot spots • Promoting viral suppression among individuals from health disparity populations engaged in HIV care • Partnerships with CFARs and RCMI in the areas of health disparity research in HIV/AIDS
National Institute of Nursing Research (NINR)	<ul style="list-style-type: none"> • Interventions to improve health outcomes, management of comorbidities, and quality of life among older adults with HIV • Nursing-led case management and community health interventions for prevention and care of HIV and STI • Expanding the use of technology to support HIV prevention and care programs, improve ART adherence, and to reduce health disparities • Research on physical activity, dietary intake, and longitudinal conditions in people with HIV • Improving clinician-patient communication in HIV care • Interventions to address intersectional stigma and reduce structural racism and discrimination
NIH Office of Research on Women’s Health (ORWH)	<ul style="list-style-type: none"> • ORWH works with the 27 NIH Institutes and Centers to advance rigorous research of relevance to women and individuals assigned female at birth. Intersectional approaches to women, aging and HIV are of particular interest for ORWH. • HIV & menopause • HIV prevention among older populations of women • Comorbidity and multimorbidity among older populations of women with HIV • Consideration of gender as a social and structural variable among older women with HIV

Selected Collaborative Cohort Studies and Unique Resources		URL	Participating NIH ICOs
ACCESS	AIDS Care Cohort to Evaluate Exposure to Survival Services	https://www.bccsu.ca/access/	NIDA
ACSR	AIDS Cancer Specimen Resource	https://acsr1.com/	NCI
ACTG	AIDS Clinical Trials Group	https://actgnetwork.org/	NIAID
ALIVE	AIDS Linked to the Intravenous Experience	https://www.jhsph.edu/research/affiliated-programs/aids-linked-to-the-intravenous-experience/	NIDA
AMC	AIDS Malignancy Consortium	https://amcooperations.com/	NCI
ANCHOR	Anal Cancer/HSIL Outcomes Research Study	https://anchorstudy.org/	NCI
ARC	AIDS Research Centers	https://www.nimh.nih.gov/about/organization/dar/aids-research-centers-program	NIMH

CFAR	Centers for AIDS Research	https://www.niaid.nih.gov/research/centers-aids-research	NIAID, NCI, NHLBI, NIA, NICHD, NIDCR, NIDA, NIDDK, NIMH, NIMHD, NINR, FIC
CHARTER	CNS HIV Anti-Retroviral Therapy Effects Research	https://charternntc.org/	NIMH, NIDA, NINDS
CNICS	CFAR Networks of Integrated Clinical Systems	https://sites.uab.edu/cnics/	NIAID, NIDA, NIAAA
GpCRC	Gastroparesis Clinical Research Consortium	https://jhucsc1.us/gpcrc/	NIDDK
HACM	HIV/AIDS Cancer Match Study	https://dceg.cancer.gov/research/who-we-study/cohorts/hiv-aids-cancer-match-study	NCI
HAILO	A5322: Long-Term Follow-up of Older HIV-infected Adults in the ACTG: Addressing Issues of Aging, HIV Infection and Inflammation	https://actgnetwork.org/clinical-trial/a5322-long-term-follow-up-of-older-hiv-infected-adults-in-the-actg-addressing-issues-of-aging-hiv-infection-and-inflammation-hailo-2/	NIAID
HEART	Effects of HIV, Cocaine, and Prolonged ART Use on Subclinical Cardiovascular Disease		NIDA
HLB SIMPLE	Heart, Lung, and Blood Co-Morbidities Implementation Models in People Living with HIV	https://www.hlbsimple.org/	NHLBI
HOPE	Healthy Outcomes Around Pregnancy and Exposure to HIV/ARVs	https://phacsstudy.org/Our-Research/HOPE	NICHD
HYM/TRUTH	Healthy Young Men's Study	https://www.chla.org/research/adolescent-and-young-adult-medicine/hymtruth	NIDA
ieDEA	International epidemiology Databases to Evaluate AIDS	https://www.iedea.org/	NIAID, NCI, NICHD, NIMH, NHLBI, NIDDK, NLM, NIAAA, FIC, NIDA
JHHCC	Johns Hopkins HIV Clinical Cohort		NIDA
LCN	Liver Cirrhosis Network	https://www.lcnstudy.org/	NIDDK
MWCCS	MACS/WIHS Combined Cohort Study	https://statepi.jhsph.edu/mwccs/	NHLBI, NICHD, NIA, NIDCR, NIAID, NINDS, NIMH, NIDA, NINR, NCI, NIAAA, NIDCD, NIDDK, NIMHD
NA-ACCORD	North American AIDS Cohort Collaboration on Research and Design (part of ieDEA)	https://naaccord.org/monitoring	NIAAA, NCI
NASH	Nonalcoholic Steatohepatitis Clinical Research Network	https://jhucsc1.us/nash/	NIDDK
NNTC	National NeuroAIDS Tissue Consortium (NNTC)	https://nntc.org/	NIMH, NIDA, NINDS
NOURISH-OK	Nutrition to Optimize, Understand, and Restore Insulin Sensitivity in HIV for Oklahoma	https://www.tulsacares.org/nourish-ok/	NIDDK
PHACS	Pediatric HIV/AIDS Cohort Study	https://phacsstudy.org/	NICHD, NIAAA, NIAID, NIDCD, NIDCR, NIDA, NIMH, NINDS, NCI, NHLBI

PRECLUDE	Implementation Research to Develop Interventions for People Living with HIV		NHLBI
PREPARE	A5361s: Pitavastatin to REduce Physical Function Impairment and FRailty in HIV	https://actgnetwork.org/clinical-trial/a5361s-pitavastatin-to-reduce-physical-function-impairment-and-frailty-in-hiv-prepare/	NIAID
RADAR	Multilevel Influences on HIV and Substance Abuse Use in a YMSM Cohort	https://cepim.northwestern.edu/radar	NIDA
REPRIEVE	Randomized Trial to Prevent Vascular Events in HIV	https://www.reprievetrial.org/	NHLBI, NIAID
SCORCH	Single Cell Opioid Responses in the Context of HIV	https://scorch.igs.umaryland.edu/	NIDA
SEARCH	Sustainable East Africa Research for Community Health Study	https://www.searchendaids.com/	NIAID
STAR	Study of Treatment and Reproductive Outcomes	https://statepi.jhsph.edu/star/	NICHD
VACS	Veterans Aging Cohort Study	https://medicine.yale.edu/intmed/vacs/	NIAAA
	Inter-CFAR HIV & Aging Working Group	https://cfar.emory.edu/swgs/inter-and-intra-cfar-working-groups/	NIAID
	Multi-omic Predictors of Renal Function among HIV-infected population		NIDDK
	Food as Medicine for HIV		NIDDK
	Elucidating the Molecular Mechanisms that Mediate DKD Progression in Patients Living with HIV		NIDDK
	Kaiser Permanente (Health Utilization)		NIAAA

Abbreviations	
AD/ADRD	Alzheimer's disease/Alzheimer's disease-related dementias
ADL	Activities of daily living
ART/ARV	Anti-retroviral therapy/Anti-retroviral
ATI	Analytical treatment interruption
AUD	Alcohol use disorder
bnAb	Broadly neutralizing antibody
BMD	Bone mineral density
BSSR	Behavioral and social sciences research
CAB	Community advisory board

cART	Combination anti-retroviral therapy
CCC	Comorbidities, coinfections, and complications
CDC	Centers for Disease Control and Prevention
CFAR	Centers for AIDS Research
CKD	Chronic kidney disease
CNS	Central nervous system
CSF	Cerebrospinal fluid
CTN	Clinical trials networks
CVD	Cardiovascular disease
DDI	Drug-drug interaction
DKD	Diabetic kidney disease
DM	Diabetes mellitus
HAART	Highly active anti-retroviral therapy
HAND	HIV-associated neurocognitive disorder
HLBS	Heart, lung, blood, sleep-related (diseases)
HRSA	Health Resources and Services Administration
HSIL	High-grade squamous intraepithelial lesions
HTN	Hypertension
INSTI/II	Integrase strand transfer inhibitor/Integrase inhibitor
mAb	Monoclonal antibody
MACE	Major adverse cardiac events
NADC	Non-AIDS defining cancers
NCI	Neurocognitive impairment
NIH ICO	NIH Institutes, Centers, and Offices
NIH OAR	NIH Office of AIDS Research
NNRTI	Non-nucleoside reverse transcriptase inhibitor
NOFO	Notice of funding opportunity
NOSI	Notice of special interest
NRTI	Nucleoside/nucleotide reverse transcriptase inhibitor
ONAP	Office of National AIDS Policy (White House)
ODD	Opioid use disorder
PEP	Post-exposure prophylaxis
PI	Protease inhibitor
PLWH/PWH	People living with HIV/People with HIV

PrEP	Pre-exposure prophylaxis
RCT	Randomized clinical trial
RCMI	Research Centers in Minority Institutions
SAMHSA	Substance Abuse and Mental Health Services Administration
SCT	Stem cell transplant
SDoH	Social determinants of health
SGM	Sexual and gender minorities
STI	Sexually transmitted infection
SUD	Substance use disorder
WG	Working group
WLHIV	Women living with HIV