



Cellas Ari'ka Hayes

Postdoctoral Scholar, Epidemiology

 Curriculum Vitae available Online

Bio

BIO

Dr. Cellas Hayes is a first-generation college graduate, neuroscientist, and postdoctoral fellow at Stanford University. He holds a bachelor's degree in Biology and minors in Classics, and Latin from the University of Mississippi (2019) and earned his Ph.D. in Pharmaceutical Sciences with an emphasis in Pharmacology (2022), where he received advanced neuroscience research training under Dr. Nicole Ashpole's guidance.

At Stanford, Dr. Hayes employs cutting-edge epidemiological and biostatistical methods with high-dimensional biological data to investigate the impact of cerebrovascular and Alzheimer's disease pathologies on age-related outcomes such as cognitive decline and dementia. He has established national collaborations including the Strong Heart Study, Cardiovascular Health Study, Health and Aging Brain Study - Health Disparities, and the National Alzheimer's Coordinating Center.

Dr. Hayes is becoming a recognized leader in his field and beyond, serving as a Stanford Propel Postdoctoral Fellowship Alumni, a Burroughs Wellcome Fund PDEP Fellow, and a HABS-HD Health Enhancement Scientific Program Fellow, and diversity supplement recipient. He is the founder and chair of the National Black Postdocs Emergency Support Program and a former co-president of the Stanford Black Postdocs Association. As a postdoc, Dr. Hayes has accrued over 500K in fellowship funds while participating in notable professional development programs like the NIH NIMHD HDRI and NIA Butler Williams Scholars Program. At UM, Dr. Hayes was the first recipient to receive a NIH NRSA F31 in 37 years while also being a Southern Regional Education Board Scholar and UMMC-GTEC Smith Scholars Program.

Passionate about mentorship and education, Dr. Hayes develops innovative resources and curricula through the Stanford Grant Writing Academy, where he has trained postbaccalaureate, doctoral, and postdoctoral scholars in grant writing and career development.

STANFORD ADVISORS

- Michelle Odden, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **White matter hyperintensities mediate a greater proportion of age-related lower cognitive scores in non-Hispanic White participants compared to non-Hispanic Black and Hispanic participants: HABS-HD ALZHEIMER'S & DEMENTIA: DIAGNOSIS, ASSESSMENT & DISEASE MONITORING**
Hayes, C. A., Prasad, S., Dharmapuri, A., Thorpe Jr, R. J., Hlth & Aging Brain Study HABS HD Study Team
2026; 18 (2)
- **White matter hyperintensities mediate a greater proportion of age-related lower cognitive scores in non-Hispanic White participants compared to non-Hispanic Black and Hispanic participants: HABS-HD. *Alzheimer's & dementia (Amsterdam, Netherlands)***
Hayes, C. A., Prasad, S., Dharmapuri, A., Thorpe, R. J.
2026; 18: e70353

- **Contrasting associations of diastolic blood pressure with plasma amyloid, tau, and neurodegeneration biomarkers in the Health and Aging Brain Study-Health Disparities (HABS-HD).** *Journal of Alzheimer's disease : JAD*
Hayes, C. A., Agwu, C., Dharmapuri, A., Contreas, J. A.
2026: 13872877261427706
- **Sex differences in blood pressure hemodynamics and white matter hyperintensity volume across racial ethnic groups-HABS-HD.** *Alzheimer's & dementia (New York, N. Y.)*
Hayes, C. A., Briggs, A. Q., Gills, J. L.
2026; 12 (1): e70214
- **Projected Cognitive and Brain Aging Benefits of Eliminating Cardiometabolic Risks in Non-Hispanic White and Black Males - HABS-HD.** *Journal of racial and ethnic health disparities*
Hayes, C. A., Dharmapuri, A., Odden, M. C., Thorpe, R. J.
2026
- **Examining APOE ε4 and Longitudinal Vascular Brain Injury: The Strong Heart Study.** *Neurology open access*
Hayes, C. A., Odden, M. C., Levendovszky, S. R., Buchwald, D. S., Verney, S., Shibata, D. K., Zhang, Y., Ali, T., Suchy-Dicey, A. M.
2026; 2 (1)
- **Plasma p-tau217 and cognitive impairment: Evaluating biomarker equity across racial/ethnic groups in HABS-HD.** *Alzheimer's & dementia (Amsterdam, Netherlands)*
Hayes, C. A., Najmi, Z., Contreras, J. A., Dharmapuri, A., Winston, C. N.
2026; 18 (1): e70269
- **Independent associations of phosphorylated tau181 and neurofilament light with cognitive outcomes in the Health and Aging Brain Study-Health Disparities (HABS-HD).** *Journal of Alzheimer's disease : JAD*
Housini, M., Contreras, J. A., Hayes, C. A.
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- **STROKE INCIDENCE AND HIGH-SENSITIVITY C-REACTIVE PROTEIN AMONG AFRICAN AMERICANS: THE JACKSON HEART STUDY ETHNICITY & DISEASE**
Hayes, C. A., Thorpe, R. J., Dharmoon, M., Heitman, E., Norris, K. C., Beech, B. M., Bruce, M., Walker, B., Reneker, J. C.
2025; 35 (1): 1-7
- **Public Health.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
Hayes, C. A., Abdullah, L. B., Gills, J. L., Odden, M. C.
2025; 21 Suppl 6 (Suppl 6): e099530
- **Discontinuation of Anticholinergic Medications Among VA Nursing Home Residents With and Without Dementia**
Hayes, C.
OXFORD UNIV PRESS.2025
- **Population intervention models of racial ethnic disparities in cognitive outcomes from cardiometabolic risk factors - HABS-HD.** *Alzheimer's research & therapy*
Hayes, C. A., Abdullah, L., Gills, J., Odden, M. C., Health and Aging Brain Study (HABS-HD) Study Team
2025; 17 (1): 217
- **Micro infarcts are associated with cognitive impairment in neurofibrillary tangle predominant decedents: evidence from the NACC autopsy cohort.** *Alzheimer's research & therapy*
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2025; 17 (1): 216
- **Application of modified Poisson regression for risk estimation of major neuropathology outcomes: National Alzheimer's coordinating center.** *Journal of Alzheimer's disease : JAD*
Hayes, C. A., Odden, M. C., Thorpe, R. J.
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- **Targeting the cardiometabolic bottleneck to slow polyopathy and cognitive decline.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
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- **Sex differences in the association of cardiometabolic risk scores and blood pressure measurements with white matter hyperintensities in diverse older adults-HABS-HD.** *Frontiers in aging neuroscience*
Hayes, C. A., Vintimilla, R., Chaudhuri, S., Odden, M. C.
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- **Racial and ethnic differences in cardiometabolic predictors of white matter hyperintensities burden among males: The HABS-HD study.** *Journal of Alzheimer's disease : JAD*
Hayes, C. A., Jones, R., Thorpe, R. J.
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- **Microinfarcts are Associated with Cognitive Impairment in Neurofibrillary Tangle Predominant Decedents: Evidence from the NACC Autopsy Cohort.** *Research square*
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- **Age-dependent interactions of APOE isoform 4 and Alzheimer's disease neuropathology: findings from the NACC.** *Acta neuropathologica communications*
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- **Racial ethnic variations in the cardiometabolic determinants and blood pressure of white matter hyperintensities among females-The HABS-HD Study.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
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- **Stroke Incidence and High-Sensitivity C-Reactive Protein Among African Americans: The Jackson Heart Study.** *Ethnicity & disease*
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2025; 35 (1): 1-7
- **Insulin-like growth factor-1 and cognitive health: Exploring cellular, preclinical, and clinical dimensions.** *Frontiers in neuroendocrinology*
Hayes, C. A., Wilson, D., De Leon, M. A., Mustapha, M. J., Morales, S., Odden, M. C., Ashpole, N.
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- **Empowering Early Career Researchers: The Jackson Heart Study Smith Scholars Program.** *Journal of racial and ethnic health disparities*
Hayes, C. A., Jones, R.
2024
- **Revolutionizing Postdoctoral Training Using the Social Ecological Model: Insights and Experiences from the Propel Scholars** *GEN BIOTECHNOLOGY*
Hayes, C. A., Headley, C. A., Nava, A. R., Vizcarra, E. A., Garcia, K. C., Mullen, M. M. S., Morales, J., Venida, A. C., Follis, S.
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- **Unlocking the power of virtual networking for early-career researchers.** *eLife*
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