

MESA Neurocognitive Studies	MESA Exam 5	MESA Exam 6	MIND visit A	Exam 7 / MIND B
Years	2010-12	2016-19	2019-21^d	2022-23^d
Core Cognitive tests (CASI, DSC, DS)	All, n=4591	Sub, n=2000 ^{abc}	n=2060	<i>ongoing, repeated</i>
Uniform Data Set v 3 + adjudication		WFU, n=320 ^b ; JHU, n=380 ^c	n=2060	<i>ongoing, repeated</i>
Brain MRI		All, n=1200 ^{ab}	<i>n=231, (total first MRI, n=1431)</i>	<i>ongoing, repeated</i>
Amyloid-PET (3 sites, 1 assessment)		WFU, n=160 ^b	JHU, Col, WFU, n=139	<i>ongoing, JHU, Col, WFU, n=up to 600</i>
Plasma AD biomarkers	<i>TBD</i>	n=310, WFUa	<i>TBD</i>	<i>ongoing, ACT^e</i>

Studies funding neurocognitive data collection

- a. MESA Afib (all sites, subset Exam 6) R01HL127659, PI: Susan Heckbert
- b. MESA Memory (WFU, Exam 6, MIND A) R01AG054069, PI: Tim Hughes
- c. MESA Epigenetics (JHU, Exam 6, MIND A) R01AG054474, PI: Jingzhong Ding and Mei Liu
- d. MESA MIND (all sites, MIND A & B) R01AG058969, PD: Tim Hughes
- e. MESA ACT (all sites, Exam 7) R01AG071032, PD: Priya Palta

Acronyms

Sub - subset

TBD - data collection ongoing or planned

WFU - Wake Forest University

JHU - Johns Hopkins University

Col - Columbia University

<u>Core MESA Cog</u>	<u>UDSv3</u>	<u>Brain MRI</u>	<u>Amyloid-PET</u>	<u>Plasma AD Biomarkers</u>	<u>Adjudicated Diagnoses</u>
CASI v2	<i>Participant</i>	Macrostructural	SUVr	Aβ40 (CBAL)	Cognitively normal
Digit symbol coding (DSC)	MoCA	Gray matter volume	Centiloids	Aβ42 (CBAL)	Mild cognitive impairment (MCI)
Digit span	Craft story / delayed	White matter volume	Visual read	p-tau 217 (CBAL)	single/multi- domain
	AVLT / delayed	WMH volume		Glial fibrillary acidic protein (GFAP, CBAL	amnesic/nonamnesic
	Benson / delayed	CSF volume		NfL (CBAL)	Dementia (+ affected domains)
	Number span	Total intracranial volume			Cannot Classify
	Trail Making Test (A&B)	AAL regions of interest		CBAL = Vermont lab	
	Trail Making Test	Cortical thickness (TBD)			
	Geriatric Depression Scale (GDS)	Microbleeds (TBD)			
	Category Fluency (A&V)	Lacunes (TBD)			
	Verbal Fluency (F&L)	...			
	Quick Dementia Rating Scale (QDRS)	Microstructural			
	<i>Informant interview</i>	Fractional Anisotropy (FA)			
	QDRS	Mean diffusivity (MD)			
	NPI-Q	Free Water (TBD)			
	FAQ	Functional			
	(enables cognitive adjudication)	BOLD resting and breath-hold			