BRIGHAM HEALTH
BRIGHAM AND WOMEN'S HOSPITAL

MASSACHUSETTS Alzheimer's Disease Research Center

MASSACHUSETTS GENERAL HOSPITAL

UPDATED 12/06/22

Clinical Trials Cheat Sheet

ACTRU Page 2

	Age	Diagnosis	Scores
Novartis	45-90	MCI, Mild AD	MMSE 20-30
JNJ (Johnson & Johnson)	55-80	Early onset AD	CDR=0.5
BCG Vaccine	55-85	MCI, mod AD	MoCA ≥ 8
NADALS Basket Trial	55-90	SCD, MCI, probable AD, mild AD	MoCA ≥ 8

CART Page 3

	Age	Diagnosis	Scores
AHEAD	55-80	CN	MMSE ≥27
NMN AD	55-85	Mild AD	MMSE ≥18 – 26 (inclusive)

CNY Page 3

	Age	Diagnosis	Scores
WALLe	60-85	CN	MMSE ≥25

Santarnecchi Lab (BIMDC) Page 4

	Age	Diagnosis	Scores
GAMMA R01	45+	MCI, Mod AD	
GIFTeD	40-80	bvFTD	MMSE ≥ 18, CDR ≤ 1

Transcranial Photobiomodulation for AD (TRAP-AD) (MGH) Page 4

	Age	Diagnosis	Scores
TRAP-AD	65-85	aMCI	CDR= 0.5-1.0

Forester Lab (McLean) Page 5

	Age	Diagnosis	Scores
CBD-AD	45+	MCI, Mod AD	
THC-AD	40-80	bvFTD	MMSE ≥ 18, CDR ≤ 1

Dickerson Neuroimaging Lab (MGH) Page 5

	Age	Diagnosis	Scores
TMS	18-90	lvPPA or nvPPA	

Northeastern MIND Lab Page 5

	Age	Diagnosis	Scores
Multimodal effects of Music Therapy on Older Adults with MCI	18-90	lvPPA or nvPPA	

Study Name	Novartis	JNJ, Johnson and Johnson	BCG Vaccine	NADALS Basket Trial
Sponsor	Novartis	Janssen Research & Development, LLC	Alzheimer's Association	Mark Albers
Study Site	**ACTRU,** Kate Cropp, kcropp1@mgh.harvard.edu, 617-643-4802	**ACTRU**, Kate Cropp, kcropp1@mgh,harvard.edu, 617-643-4802	**ACTRU**, Kate Cropp, kcropp1@mgh,harvard.edu, 617-643-4802	**ACTRU**, Kate Cropp, kcropp1@mgh,harvard.edu, 617-643-4802
Name of Drug/ Intervention & Type	Canakinumab (ACZ885 or Illaris)	JNJ-63733657	BCG Vaccine	baricitinib
How it works	Canakinumab (ACZ885) is an anti-inflammatory agent used for symptomatic treatment of cognition for participants with Mild Cognitive Impairment or Mild Alzheimer's Disease who have evidence of peripheral inflammation.	JNJ-63733657 is an immunotherapy (antibody drug) designed to bind to the tau protein and to try to prevent it from spreading through the brain and continuing to build up in brain cells.	Japan Bacillus Calmette-Guérin vaccine, thought to have "off target" effects in the immune system- specifically on T regulatory cells, which maintain homesostasis of the immune response.	An inhibitor of janus kinase (JAK), blocking the subtypes JAK1 and JAK2.
Study Design	Exploratory Platform Trial on Anti-Inflammatory agents in Alzheimer's Disease (EXPLAIN-AD)- This trial is a randomized placebo controlled double blind multi-center study. The EXPLAIN AD study uses a platform type design to investigate multiple targeted therapies. Each investigational agent and matching placebo will be considered a unique cohort. Each cohort will have the same evaluations and assessments. For cohort 1, participants are randomized to one of two arms: placebo or canakinumab 150 mg. The total study length is 10 months. The screening period is from day -60 to -6 and includes ICF, med hx, cog testing, and csf sampling to confirm amyloid and tau positivity. Treatment period of 20 weeks with subcutaneous injections of the drug performed at 9 study visits. Completion evaluation occurs 30 days after last agent was administered.	A Randomized, Double-blind, placebo-controlled, parallel-group, Multicenter study to assess the efficacy and safety of JNJ-63733657, an anti-tau monoclonal antibody, in participants with early Alzheimer's disease. Participants begin with 12-week screening period, followed by 128-232 weeks of treatment with the study drug or placebo. Total study duration ranges from 2.5 - 4.5 years depending on time of enrollment. All participants must complete a treatment period of 2.5 years. Consists of in person visits every 4 weeks to receive infusions of the study drug and undergo other study procedures such as MRIs, cognitive testing, PET scans, and neuro and physical examinations.	BCG is an open label trial evaluating the BCG vaccine in participants with Alzheimer's Disease. In person visits occur at screening (split into two visits), baseline, day 28, day 84, day 182, and day 364. Study activities include cognitive testing, optional MRIs, lumbar puncture, and 2 doses of the BCG vaccine.	Participants will complete various cognitive assessments, lumbar punctures, and biological sample collection to help researchers assess whether 8 weeks of an oral dosage of baricitinib 2 mg per day, 4 mg per day, or both achieves measurable levels of baricitinib, and decreases levels of the inflammatory biomarker chemokine ligand 2 (CCL2), in the CSF of patients with AD.
Study Duration	12 months	Screening period of 12 weeks and 128-232 weeks of treatment	2 years (7 in person visits and 3 telephone phone calls).	8-9 visits over approximately 258 days
Subject Population	Mild Cognitive Impairment due to Alzheimer's or Mild Alzheimer's Disease with evidence of peripheral inflammation and at least a 6-month documented decline in cognitive function prior to screening.	Individuals 55-80 years old with a diagnosis of Early Alzheimer's Disease (CDR=0.5) and who have experienced a gradual and progressive subjective decline in the participant's cognition over the past 6 months.	Mild Cognitive Impairment or moderate dementia due to Alzheimer's Disease (MoCA ≥ 8 and Global CDR: 0.5- 2)	SCD, MCI, AD MoCA ≥ 8
Age	45-90	55 to 80 years	55-85	55-90, inclusive
Allowed meds	3mo stable dose of ChEI and/or memantine	2 mo stable dose of AChEI and/or memantine	3mo stable dose of Cholinesterase inhibitors and/or memantine	--
Exclusionary Investigational Meds or Procedures	Current medical or neurological conditions that impact cognition or performance on cognitive assessments. Treatment with immunosuppressive drugs and/or oral prednisone greater than 10 mg/day within the past 30 days of screening and baseline. Vaccination or immunization with any live vaccine or the pneumococcal vaccine within the past 3 months of baseline. Current use of medications, other than cholinesterase inhibitors and/or memantine, that could alter cognition. Current cannabis use.	Participants with inadequate levels of tau in their brain as determined by a Tau PET scan during screening. Past or present treatment with aducanumab. Participants who fulfill diagnostic criteria for MCI or dementia/mild or major neurocognitive disorder suspected to be due to any etiology other than AD	Prior BCG vaccination; hx of chronic infection such as HIV, positive T-spot test, COVID+ test in last 3 months, or close contact with known COVID+ within 1 month of screening; Use of metformin within past 1 year; previous active immunization research for AD (ever) or passive immunotherapy for AD within past 3 months; current use of ASA >160mg/day or chronic use of NSAID; Living/working with people who are immunocompromised.	Anticoagulants (that, in the opinion of the investigator, would compromise the safety of the participant); Previous treatment with Baricitinib); major surgery within 8 weeks of screening: experimental interventions for AD (within 5.5 half-lives or 30 days of screening, whichever is longer)
MRI/ PET/ LP?	☒MRI ☒PET ☒LP	☒MRI 6-11 ☒PET 3-6 ☒LP 3-5 Optional	☒MRI 2 opt ☐PET. ☒LP 3 required Yes- 2 optional	☐MRI ☐PET ☒LP 4
Reimbursement	Up to $800	$25 for each completed visit; $100 for each LP; $100 for Tau PET scan	Up to $540 ($740 if optional MRIs are completed)	$1,100
Open Label?		No (as of now)		

Study Name	AHEAD (A3/A45)	A Proof-of-Concept Trial of Sirtuin-NAD+ Activator in Alzheimer's Disease	WALLe
Sponsor	Eisai	NIA	NIH/NIA
Study Site	**CART,** PI Seth Gale, Jennifer Ramirez jramirez@pcpo.partners.org	**CART**, Bella Levesque ilevesque@bwh.harvard.edu 617-278-0381	**CNY Martinos Imaging center, PI H. Jacobs**
Name of Drug/ Intervention & Type	BAN2401	NMN	Transcutaneous vagus nerve stimulation (tVNS)
How it works	BAN2401 is a novel humanized immunoglobulin G1 (IgG1) monoclonal antibody that preferentially binds to Aβ protofibrils, a high molecular weight soluble species of aggregated Aβ. Protofibrils have been implicated in altering synaptic function and mediating neurotoxicity leading to cognitive decline and, ultimately, the dementia observed as AD progresses clinically. Binding of BAN2401 to protofibrils and fibrils (the component of plaques) is thought to enhance their clearance (CL), with a subsequent neutralization of toxicity to neurons in the brain resulting in less neurodegeneration and cognitive decline.	This is a single-center, placebo-controlled study of twenty-four participants with mild Alzheimer's disease (AD) dementia. Participants will complete physical/neuro exams, blood draws, ECGs, cognitive assessments and questionnaires, 2 7T MRI scans, and 2 lumbar punctures. Participants will also take the study drug, MIB-626, vs. placebo twice daily for the 90-day intervention period to investigate whether MIB-626 penetrates the blood-brain barrier and, if yes, to determine if the study drug alters different circulating biomarkers of aging.	Electrical stimulation to the ear during 12 sessions to test the extent and duration of RAVANS on cognitive outcomes and identify demographic and neurobiological characteristics that predict a positive response to RAVANS in individuals along a wide range of AD pathology
Study Design	A Placebo-Controlled, Double-Blind, Parallel-Treatment Arm, 216 Week Study to Evaluate Efficacy and Safety of Treatment with BAN2401 in Subjects with Preclinical Alzheimer's Disease and Elevated Amyloid (A45 Trial) and in Subjects With Early Preclinical Alzheimer's Disease and Intermediate Amyloid (A3 Trial). Participants will receive 5 mg/kg for the first 8 weeks, titrated to 10 mg/kg thereafter via IV infusion. A3: once per month & A45: once every two weeks for the first 2 yrs; once per month for the last 2 yrs	The primary objective of this Phase I trial is to determine whether MIB-626, after its daily oral administration, penetrates the blood-brain barrier in humans by measuring the cerebrospinal fluid (CSF) concentrations of nicotinamide mononucleotide (βNMN) and its key metabolites at the start and end of the 90-day treatment period.	Each session involves pen & paper or computer test for cognitive testing. 2 MRI. Monitor sleep activity. 2 blood draw. Visit 1: screening visit. Visit 2: Blood draw, cognitive assessment and 7T MRI with RAVANS. Visit 3: cognitive assessment and 7T MRI with RAVANS. Visit 4 till 13: cognitive assessment with RAVANS. Visit 14 and 15: cognitive assessment
Study Duration	4 years	~5 months	Participants will be participating in 15 visits over 6 months
Subject Population	*CN older adults *55-64 must have a + amyloid status in addition to one of the following: -First degree relative diagnosed with Alzheimer's Disease before the age of 75 -Prior positive amyloid PET scan -Positive APOE-4 status	Men and women with mild AD dementia, MMSE 18-26 inclusive, CDR global 0.5 or 1	pre-symptomatic older participants. Will try to include 50% females and 50% individuals who carry at least one E4 allele of the APOE genotype. With well-controlled vascular risk factors, stable medications for at least 30 days. MMSE for age and education of 25 to 30, inclusive or a Telephone Interview for Cognitive Status score of at least 32. 1.5 S.D. of age and education matched norms on the Logical Memory Paragraph Delayed Recall. Geriatric Depression Scale < 11. Right-handed. Reduced vision allowed if it can be corrected with MRI-goggles
Age	55-80	55-85, inclusive	60-85
Allowed meds		Meds for AD dementia allowed but must be stable for at least 8 weeks before screening	-
Exclusionary Investigational Meds or Procedures	* Cholinesterase inhibitor and/or memantine *All meds must be stable for 4 weeks *Must be cancer free for at least 3 years *No diagnosis of ADHD	Niacin or dietary supplements containing nicotinamide mononucleotide (NMN) or nicotinamide riboside (NR); antipsychotic medications, antidepressant medications with anticholinergic side effects. unstable medications (<8 weeks)	Dx MCI or dementia. Use of investigational drugs or devices within 60 days prior to screening. Significant hepatic or renal disease, contraindications to MRI, medical condition associated with elevated amyloid levels, major psychiatric disorders, history of major head trauma, substance abuse within the past 2 years, active hematological, renal, pulmonary, endocrine or hepatic disorders, evidence of cortical infarcts or strategically placed lacunar infarct, active cancer, metabolic encephalopathy, infection, active cardiovascular disease, Huntington's disease, hydrocephalus or seizure disorder, cataracts, glaucoma, detached retina's, eye surgery involving the muscles; droopy eyelids, penetrating eye wounds and use of anticholinergic eye drop use that may affect pupil dilation measurements, , recurrent vaso-vagal syncopal episodes, unilateral or bilateral vagotomy, severe valvular disorder, sick sinus syndrome, hypotension
MRI/ PET/ LP	☒MRI ☒PET ☒LP optional	☒MRI 2 ☐PET ☒LP 2 required	☒MRI 2 ☐PET ☐LP
Reimbursement	$50 per visit	$100 per visit, $100 per MRI, $200 per LP, $50 per SP visit. Parking, transportation, and meal vouchers included.	$50 for screening visit; $100 each for visit 2 and visit 3 $25 each for returing the actigraph after two weeks after visit 1, and one week after visit 13; $100 each for visit 4,8,9 and 13 $50 each for vist 5,6,7,10,11,12, 14 and 15
Open Label?	Yes		

Study Name	GAMMA R01 at BA Center - Leland Wood	GIFTeD (Non-invasive Brain Stimulation for Gamma-induction and Cognitive Enhancement in FTD)	\Transcranial Photobiomodulation for AD (TRAP-AD)
Sponsor		Alzheimer's Drug Discovery Foundation	NIA and AA
Study Site	BIDMC PI Emiliano Santarnecchi, site PI Lorella Battelli. Stacey Monsell: smonsell@bidmc.harvard.edu	BIMDC PI Emiliano Santarnecchi, site PI Lorella Battelli. Julianne Rose Reilly, jrreilly@mgh.harvard.edu	Cassano Lab pbm@mgh.harvard.edu; 617-724-4539
Name of Drug/Intervention & Type	Noninvasive brain stimulation	transcranial alternating current stimulation (tACS	The LightForce® EXPi Deep Tissue Laser TherapyTM System, Transcranial PhotoBioModulation-1000 (tPBM2.0)
How it works	Exploring the effects and safety of two to four weeks of brain stimulation in people with early (AD). The brain stimulation that will be used is transcranial alternating current stimulation (tACS). This study will investigate whether tACS can decrease the amount of amyloid-beta and tau in people with AD. Amyloid-beta and tau will be measured using PET. EEG and TMS will measure the participants' brain rhythms and reactions to the tACS. Want to see if tACS affects memory and thinking, so participants will be asked to do cognitive testing.	This study explores the safety, tolerability, and effectiveness of 6 weeks of daily transcranial alternating current stimulation (tACS) in people with behavioral variant frontotemporal dementia (bvFTD). Cognitive testing, MRI scans, PET scans, and blood draws are used	The EXPi System's beam delivery -EmpowerTM, is modified to noninvasively deliver Near-Infrared Radiation (NIR) to the forehead. The system is configured to provide sham (placebo) treatment. Mechanisms of light therapy include: i) increased adenosine triphosphate (ATP) production by the mitochondria (red/NIR wavelengths of light absorbed within the mitochondria by the last complex of the electron transport chain, cytochrome C oxidase [CCO], resulting in increased ATP production); ii) increased regional cerebral blood flow (rCBF). Increased local vasodilation due to the release of nitric oxide from CCO, resulting in a focal, increased rCBF. Relevant for AD, which is associated with hypometabolism in specific brain areas and mitochondrial dysfunction.
Study Design	Two to four weeks of brain stimulation in people with early Alzheimer's Disease (AD).	to investigate whether tACS can affect brain activity to improve how the brain uses glucose for energy and functioning in people with bvFTD.	This study will be the first to evaluate the dose-dependent effects of t-PBM in amnestic Mild Cognitive Impairment (aMCI) (CDR of 0.5-1; FAST 1-3; age 65-85) in a phase I, parallel design, sham-controlled, randomized clinical trial lasting 8 weeks. 1) Recruitment language for follow-ups to those who do not respond on Patient Gateway or do not have it set up 2) Optional neuropsychological testing post optional open-label tPBM treatments and 3) $25 for optional neuropsychological testing post optional open-label tPBM treatments.
Study Duration	2-4 month study. 5-7 days of baseline and screening visits, 10-20 study visits, 5-10 days follow-up visits.	9 months with majority of visits occurring in the first 3 months.	5-7 months
Subject Population	* At least 45 years of age *confirmed MCI, or moderate AD. *No history of seizures, epilepsy, stroke, or other significant neurological disorders, major psychiatric or neurodevelopmental disorder or intellectual disability.	Behavioral variant frontotemporal dementia (MMSE ≥ 18, CDR ≤ 1)	"Meets the Petersen MCI criteria for Amnestic MCI (single and multiple domain) with a Clinical Dementia Rating (CDR) between 0.5-1.0, and a FAST of 1-3."
Age	45+	40-80	65-85
Allowed meds	-	--	stable use (≥ 6 months) of memantine or acetylcholinesterase
Exclusionary Investigational Meds or Procedures	-	No excluded meds; just need to be on a stable dose of medications for >30 days prior to enrollment	Hx of cardiovascular or cerebrovascular pathology;unstable systemic medical disorders;other major psychiatric illness;drug or alcohol abuse;medications affecting cognition;family hx of early onset
MRI/ PET/ LP	☒MRI ☒PET ☐LP	☒MRI 2 ☒PET 2 ☐LP	☒MRI ☒PET ☐LP
Reimbursement	Yes	Up to $500	Total $1525
Open Label?	No	No	
Enrollment Goal	9 participants as of 8/21, no data as of 1/22, 9/7/22 Goal of 50 participants, 10 enrolled	25 patients, 9 participants as of 8/21, no data as of 1/22	Screen 75 to enroll 51 participants (6 participants enrolled as of 1/22)
Study Visit Status	In person	In person, with some baseline and follow-up 4 conducted remotely	

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To refer patients, please contact the appropriate study site using the contact information below

	CBD-AD	THC-AD	TMS Study	Multimodal Effects of Music Therapy on Older Adults with Mild Cognitive Impairments
Study Name				
Sponsor	Spier Family Foundation	NIH	NIH	Participating sites include Northeastern University MIND Lab; Brigham and Women's Hospital, Dept. of Behavioral Neurology; Berklee College of Music Department of Music Therapy
Study Site	**Forester Lab**, McLean Hospital, Stefanie Wong: 617-855-3107 Swong18@partners.org	**Forester Lab**, McLean Hospital, Stefanie Wong: 617-855-3107 Swong18@partners.org	**Dickerson Neuroimaging Lab,** Gent Celaj GCELAJ@mgh.harvard.edu	**Northeastern MIND Lab,** Milena Quinci: 617-373-2161 | m.quinci@northeastern.edu
Name of Drug/Intervention & Type	A custom-formulated high-CBD/low-THC sublingual solution developed by Staci Gruber, PhD at McLean Hospital.	Dronabinol, FDA approved for treating other symptoms.	TMS	Music Based Intervention
How it works	CBD-AD is an eight-week open-label clinical trial of a custom-formulated high-CBD/low-THC sublingual solution.	The primary objective is to assess dronabinol as a treatment for moderate to severe agitation in AD patients.	Stimulate left angular gyrus at a point most highly functionally correlated to the hippocampus in an effort to improve memory performance. Daily visits (M-F) for 2 weeks	Music based interventions may down-modulate inflammation pathways and activate the brain's reward system thereby potentially improving mood and thinking symptoms.
Study Design	This study consists of weekly visits over a total of 10 weeks. There will be 7 in-person research visits and up to 8 phone check-ins. Participants can also opt to complete some study procedures remotely. Scales that will be administered during the study visits and can be completed remotely include: GAD-7, medication side effect questionnaire, NPI-C, CMAI, ADCS-ADL, Zarit Caregiver Burden Interview, 3D-CAM and FAM-CAM (safety measures), and CGI-I. Additionally, during the screening visit subjects will be given the MINI and during the baseline visit subjects will be given the CGI-S.	THC-AD is a three-week placebo-controlled, double-blind, randomized clinical trial of dronabinol (10 mg daily) in 80 inpatients or assisted living facility (ALF) residents with severe Agit-AD. Dronabinol is a synthetic drug version of tetrahydrocannabinol (THC), the main psychoactive ingredient in marijuana.		Phase I, Randomized Controlled Trial, Double blind, Efficacy study of Music Based Intervention in Patients with Amnestic Mild Cognitive Impairment.
Study Duration	8 weeks	3 weeks	4 weeks	8 weeks total. The study consists of up to 3 sessions of approximately 90 minutes each
Subject Population	Diagnosis of probable Alzheimer's Dementia (criteria from McKhann et al.) MMSE score of 15-24 (inclusive) Clinically significant degree of anxiety, as defined by a Clinical Impression total column score of ≥4 on the Anxiety domain of the NPI-C	Diagnosis of dementia due to AD, presence of agitation symptoms defined clinically, must be able to provide consent. No unstable med conditions, seizure hx.	Primary Progressive Aphasia (lvPPA or nvPPA). Biomarkers a plus.	MCI, Healthy Older Adults. MCI: global CDR of 0.5, MMSE 24-30.
Age	60-90 years old	60-95	18-90	50-90 years old.
Allowed meds			--	Needs to be on stable doses of AD meds and/or psychotropic meds (e.g., SSRIs, MAOIs, TCA) for ≥ 6 weeks prior to baseline and until randomization.
Exclusionary Investigational Meds or Procedures	Strong inhibitors or inducers of CYP3A4 (e.g. fluconazole, fluoxetine, fluvoxamine, ticlopidine, St. John's Wort, etc.), CYP2C19 (ketoconazole, erythromycin, etc.), or anti-epileptic drugs	Lithium		Any investigational product 30 days prior to screening
MRI?	☐MRI ☐PET ☐LP	☐MRI ☐PET ☐LP	☒MRI ☐PET ☐LP	☒MRI ☐PET ☐LP
Reimbursement	Subjects will be paid $300 for completion all visits. For subjects who do not complete all visits, they will be paid $30 for each in-person visit completed and $10 for each phone check-in.	$50 at beginning of study & $50 at study completion	$25/hr, parking included, transportation reimbursed	Participants will be compensated at a rate of $20 per hour.
Open Label?	Yes			No

CNY Observational Imaging Studies

Amariglio Lab *Page 6*

	Age	Diagnosis	Scores
SCD	60-90	SCD	MMSE 26-30

Chhatwal Lab *Page 6*

	Age	Diagnosis	Scores
SONNET	50-90	SCD, MCI, AD	MMSE 15-30

Marshall Lab *Page 6*

	Age	Diagnosis	Scores
IADL- R01	55-90	MCI, MBI	MMSE 24-30

Vannini Lab Page 6

	Age	Diagnosis	Scores
AWARE	55-90	AD	MMSE 18-26, CDR 0.5-1.0

Lam Lab *Page 7*

	Age	Diagnosis	Scores
Multimodal investigation of hyperexcitability in AD	55-90	AD	MMSE 18-26, CDR 0.5-1.0

Johnson Lab *Page 7*

	Age	Diagnosis	Scores
Serial Merck Study (SMK)	21-100	CN	

Gatchel Lab *Page 7*

	Age	Diagnosis	Scores
MOMENT	60-90	Late onset depression	27-30

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To refer patients, please contact the appropriate study site using the contact information below:

Study Name	**SCD** Subjective Cognitive Decline	**SONNET**	**IADL-R01 Symptomatic**	**AWARE- Memory Awareness**
Study Site & Contact	**Amariglio Lab**, *Ariel* @mgh.harvard.edu	**Chhatwal Lab,** Valentina Paz Pinilla, VPINILLA@mgh.harvard.edu and Raina Levin 617-726-5266 rlevin4@mgh.harvard.edu	**Marshall Lab,** *Onyinye Udeogu* oudeogu@mgh.harvard.edu	**Vannini Lab**, Sharon Wang swang72@mgh.harvard.edu
Sponsor	NIH	NIH	NIH	NIH
How it works/design	Participants with subjective cognitive decline complaints from community and memory disorders clinics will complete quarterly at home assessments alongside different imaging.	Researchers are interested in understanding how individual variations in sleep are related to tau and amyloid build-up in the brain.	Each participant will complete telephone and computer-based test that can help clinicians make early diagnosis for AD and monitor any change in daily functioning.	We are doing this research to investigate how the ability to accurately assess one's own memory performance changes in normal aging and brain disease, such as Alzheimer's disease. Each participant will complete different tests that focus on memory self-awareness. These tests will also be compared to imaging (scans) of the participant's brain.
Study Duration	4 years	CN= Baseline Assessments, and an 18-month follow-up & CCI= Baseline Assesments and a 12- and 24-month follow-up	3 Years	Up to 5 visits to Massachusetts General Hospital over 7 months or less
Subject Population	TICS >31 MMSE 26-30 CDR 0 to .25 Must endorse 3 questions pertaining to SCD Endorsement of unstable medical conditions, active cancer, other neurological disorders, major psychiatric disorders are exclusionary	*SCD, MCI, and mild AD dementia *MMSE 15-30 *Global CDR of 0.5 to 1.0 (minimum CDR memory box score of 0.5 is needed) Endorsement of major psychiatric disorder, cerebral vascular disease, other neurological disorders, sleep disordered breathing, use of CPAP and night/rotating shift work are exclusionary CN= Global CDR of 0, Performance above education adjusted cut-off score on the LogMem Delay of WMS-R, Did NOT endorse any of the questions on the SCD questionnaire	MMSE 27-30 (CN) MMSE 24-30 (MCI) MMSE 24-30 (MBI-decreased motivation/apathy) No endorsement of 3 questions pertaining to SCD Endorsement of major psychiatric disorder, cerebral vascular disease and other neurological disorders are exlcusionary	Diagnosis of Alzheimer's disease (Mild) MMSE 18-26 CDR 0.5-1.0 Endorsement of major psychiatric disorder, cerebral vascular disease and other neurological disorders are exlcusionary
Age	60-90	50-90	Healthy volunteers (65-90) MCI volunteers (55-90) 55-90 (MBI-decreased motivation/apathy)	55-90
Allowed meds	--	*Melatonin, Sleep Aids (<2 per week) *Cholinesterase Inhibitors *Memantine *SSRI's, SNRI, tricyclic's, and mirtazapine if stable more than 8 weeks	PRN use of benzodiazepines, potent CNS penetrant anticholinergic medications Over the counter supplements	--
Exclusionary Investigational Meds	Chronic use of benzodiazepines, potent CNS penetrant anticholinergic medications Unstable medications will not be allowed	*Sleep medication >2 per week (Melatonin is okay) *Benzodiazepines *No Supplementary oxygen *No CPAP	Chronic use of benzodiazepines Unstable medications will not be allowed	Unstable medications
MRI/PET/LP	☒MRI ☒PET ☐LP	Yes CN= 2 & CCI= 3 ☒MRI 2 or 3 ☒PET 3 or 4 ☐LP	Yes ☒MRI ☒PET ☐LP	Yes ☒MRI ☒PET ☐LP
Reimbursement	$870	Parking and transportation can be arranged based on distance. $100/appt, $100/MRI, $100/ PET, $75/ Actigraphy, $100/Overnight Study participants;	$1200	$600
Study Visit Status		In Person, Virtual	In Person	In Person

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To refer patients, please contact the appropriate study site using the contact information below:

Study Name	**Multimodal investigation of hyperexcitability in Alzheimer's disease**	**SMK-Serial PET Measures of Tau Deposition with MK6240-** *Recruitment Paused*	**MOMENT**
Study Site & Contact	**Lam Lab,** *Kyle Pellerin:* Kyle.Pellerin@mgh.harvard.edu	**Johnson Lab,** ***Marina Rodriguez Alonso:*** MRODRIGUEZALONSO@mgh.harvard.edu Mica Jadick MJADICK@mgh.harvard.edu Stella Miller SMILLER58@mgh.harvard.edu	**Gatchel Lab,** *Onyinye Udeogu* oudeogu@mgh.harvard.edu
Sponsor	NINDS and AAN	NIH; Cerveau Technologies, Inc.	NIA
How it works/design	All participants will have a > 12 hour at-home, overnight scalp EEG (set up at MGH or the participant's home); cognitive testing; and fMRI.	The overall goal of the proposed research is to evaluate the brain binding characteristics of a novel PET tracer, known as [^{18}F]MK-6240, which detects brain deposits of tau protein. In order to determine the rate at which tau accumulates, both throughout the life span and across diagnostic groups, we will measure [^{18}F]MK-6240 PET at three time points over 12 months.	Pilot study; Involving blood draws, memory and thinking tests, MRI and PET scans, and wearing an actigraphy to monitor sleep patterns and daytime activity.
Study Duration	2-3 study visits over 6 months (EEG, fMRI and cognitive testing can all be done in a 2-day period, depending on the participant's preference). Optional longitudinal cognitive testing at 1 and 2 years.	up to 20 months **<u>As of 5/2022 Recruitment is paused</u>** The test/retest has an additional MK6240 scan within 28 days of baseline PET along with all other study procedures as written in the main protocol.	13-14 visits over 60 months
Subject Population	Diagnosis of aMCI or mild dementia from probable AD CDR 0.5 or 1.	Healthy Volunteers, AD and MCI patients. For AD and MCI, must have Clinical diagnosis of MCI or AD by a neurologist, preferably including results of structured interviews such as CDR and MMSE.	Late onset moderate to severe depressive symptoms, diagnosis of major depressive disorder or persistent depressive disorder TICS score ≥ 31 Global CDR 0 or CDR 0.25 MMSE 27-30 Modified Hachinski ≤4 GDS score >11 or MADRS score of >12 at screening
Age	50-90	21-100 cognitively normal individuals 46-100 impaired participants a test/retest for individuals 21-45.	65-90
Allowed meds	--	Stable medications for at least 30 days. Stable dose of SSRI antidepressants (for mild depression only).	Stable meds for at least 30 days, psychotropic medication
Exclusionary Investigational Meds/Procedures	1.Patients with history of a seizure disorder that either: a) pre-dates the onset of their cognitive symptoms by ≥ 10 years b) has an etiology that is not thought to be related to neurodegenerative disease 2) Patients with a history of a stroke, severe traumatic brain injury with loss of consciousness, encephalitis, brain tumor, and other brain diseases that could predispose to seizures.	Unstable medications (<30 days). Use of investigational drugs or devices within 60 days prior to screening. Exposure to anti-amyloid and/or anti-tau agents within 1 year prior to screening.	Cholinesterase inhibitors and memantine Cannot currently be treated with electroconvulsive therapy
MRI/PET/LP	☒MRI ☒PET Optional ☐LP	☒MRI ☒PET 4 ☐LP	Yes ☒MRI ☒PET 2 ☒LP Optional
Reimbursement		Total $700. ($50 for screening visit, $50 for assessment visit, $100 for MRI, $100 per baseline PET scan (2), $150 per followup PET scans (2)). Parking voucher or Lyft rides provided.	
Study Visit Status		In Person; Virtual consents	In Person

Observational Studies Cheat Sheet

ACTRU *Page 10*

	Age	Diagnosis	Scores
Lifespan Biobank	55+	CN, MCI, AD, FTD	

CART *Page 10*

	Age	Diagnosis	Scores
ADNI-3	55-90	CN URM; MCI, AD	MMSE 20-24/30; CDR 0.5-1.0
TRC-PAD	50-85	CN	CDR 0 – 0.5
ASSET	55-90	MCI	MMSE 24-30

MADRC MGH, *Page 10*

	Age	Diagnosis	Scores
LC (Memory & Aging Study)	55+	CN, MCI, AD, FTD	

Dickerson Neuroimaging Lab *Page 10*

	Age	Diagnosis	Scores
ARTNI-2	40-85	PSP/CBS	
LEADS	60-64	CN, MCI, probable AD	CDR 0-1; MMSE 26-30
ALLFTD	18-90	FTLD, bvFTD, PPA, pfvPPA, FTD, ALS, CBS, PSP	
Tau PET Study	40-90	PPA, PCA, AD	

Forester Lab *Page 12*

	Age	Diagnosis	Scores
LIFT	55+	CN, MDD	MADRS <4 & >16
GMDD	55-81	MDD, Depression NOS, BD I or II, Schizoaffective Disorder, or other mood disorder	
NCRAD	55-89	Mild AD, MCI	CDR Global 0.5-1.0; MoCA 19-25 or 11-21

Gomperts Lab *Page 12-13*

	Age	Diagnosis	Scores
HDAC	18-80	PD or DLB; controls	
wAIDP	40-80	PD, PSP, MSA-P	

Quiroz Lab *Page 13*

	Age	Diagnosis	Scores
BLAST	60-90		MMSE>23; CDR 0- 0.5
Chronic Stress as a Risk for Age-Related Cognitive Decline in Latinos	55+	CN, MCI	MMSE 27-30

Viswanathan Lab *Page 13*

	Age	Diagnosis	Scores
Asymptomatic	55+	CAA and SCD	

To refer patients, please contact the appropriate study site using the contact information below:

	Lifespan Biobank	**ADNI-3** Alzheimer's Disease Neuroimaging Initiative-3	**TRC- PAD** Trial-Ready Cohort (TRC) for Preclinical/Prodromal AD (PAD) Trials	**BWH ASSET Pilot**	**Memory & Aging Study (LC)**
Study Name					
Study Site & Contact	**ACTRU**, Kate Cropp, kcropp1@mgh.harvard.edu, 617-643-4802	**CART** **Allisa Harris** **aharris34@bwh.harvard.edu**	**CART** **Allisa Harris** **aharris34@bwh.harvard.edu**	**CART** **Allisa Harris** **aharris34@bwh.harvard.edu**	MGH Judy Johanson 617-726-5571 Spanish speaking participants contact: Roberto Obregon Garcia 617-726-5571 or robregongarcia@mgh.harvard.edu
Sponsor	--	NIH		NIH	NIH
How it works/design	Observational Biobanking study to collect, store, and distribute CSF, plasma, serum, DNA and clinical information to qualified investigators	The ADNI Database is a collection of thousands of brain images, including MRI and PET scans which can be mined for data analysis.	The Trial Ready Cohort (TRC) study is to build a large group, or "cohort", of individuals who are interested in being recruited into clinical trials aimed at reducing the risk of developing AD dementia. To do this, we will collect data from cognitively normal or minimally impaired individuals and then inform them if a trial may be appropriate for them.	Participants will complete 1-1.5 hours of cognitive testing and questionnaires during Visit 1. At the end of the visit, they will be set up with the ASSET app and complete tasks on the app (~15-20 minutes). There will be 6 follow-up remote visits every 2 weeks where the participants will complete new tasks within the ASSET app.	Longitudinal study involving an initial visit and then return follow-up visit approximately every 12 months. At each visit the participant will relate their medical history, undergo a physical and neurologic exam as well as neuropsychological testing. Participants need a reliable study partner.
Study Duration	Up to one month	60 months	Biannual visits for up to 5 years or enrollment into another study	12 weeks	Once/year
Subject Population	Individuals across the entire cognitive spectrum— including cognitively normal, MCI, AD, FTD, etc	Cognitively normal minorities MCI (MMSE 24-30; CDR=0.5) AD (MMSE 20-24; CDR=0.5 or 1)	*Global CDR 0 to 0.5 *No diagnosis of dementia *Fluent in English or Spanish *Evidence of elevated or intermediate (subthreshold) levels brain amyloid as assessed by central review of amyloid PET or CSF data (Prior amyloid testing results may be used)	MCI (MMSE 24-30 inclusive)	Volunteers that are cognitively normal, MCI or mild AD from URM
Age	55 years or older	55-90	50-85	CN 60-90; MCI 55-90	18 and older
Allowed meds	All (other than anticoagulants)	Meds must be stable for 4 weeks prior to screening and AChEI and/or memantine needs to be stable for 12 weeks prior to screening.		--	N/A
Exclusionary Investigational Meds	No restrictions	Any investigational product prohibited 1 month prior to screening	*Treatment with another anti-amyloid investigational drug or other intervention within 12 months *Enrolled in another interventional clinical trial within the last 12 weeks	--	None
MRI?	☒MRI Optional ☐PET ☒LP	☒MRI ☒PET ☒LP (can be waived)	☒MRI ☒PET ☒LP	☐MRI ☐PET ☐LP	☒MRI Optional ☒PET Optional ☒LP Optional
Reimbursement	Up to $250 for completing the study: $50 for completing Visit 1, $100 for completing Visit 2, $100 for completing MRI. Parking fees for each visit, Meal vouchers redeemable at the cafeteria in MGH CNY Bldg. 149 (Visit 2 only). Transportation	Parking at each visit; Subject: $50 per visit, $100 per PET; $100 per LP; $100 per MRI	Free parking at each visit and participants may be compensated for their time	$50/visit (up to $350) No transportation as of 1/22	$50/visit
Study Visit Status		Virtual		1 in person, 6 remote	Mostly virtual with possibility for in-person

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To refer patients, please contact the appropriate study site using the contact information below:

Study Name	**4RTNI-2** 4-Repeat Tauopathy Neuroimaging Initiative, Cycle 2	**LEADS** Longitudinal Early-onset Alzheimer's Disease Study	**ALLFTD** **ARTFL-LEFFTDS LONGITUDINAL FRONTOTEMPORAL LOBAR DEGENERATION**	**Tau PET Study** Imaging tau, amyloid, and neurodegeneration in Primary Progressive Aphasia, Posterior Cortical Atrophy, and typical Alzheimer's disease
Study Site & Contact	**Dickerson Neuroimaging Lab,** Gent Celaj GCELAJ@mgh.harvard.edu	**Dickerson Neuroimaging Lab,** *Inola Howe IAHOWE@mgh.harvard.edu*	**Dickerson Neuroimaging Lab,** *Erin Krahn* ekrahn@mgh.harvard.edu	**Dickerson Neuroimaging Lab,** Sophia Tchir STCHIR@mgh.harvard.edu
Sponsor	NIA, Tau Consortium UCSF		National Institute on Aging and National Institute of Neurological Disorders and Stroke	--
How it works/design	Longitudinal neuroimaging study examining imaging, cognitive testing, neurological evaluation or biofluid biomarkers of Progressive Supranuclear Palsy, Corticobasal Syndrome or variant Progressive Supranuclear Palsy	Researchers will collect longitudinal assessments and biomarker data for 500 cognitively impaired (EOAD and non-EOAD) and 100 CN participants. These results will then be compared to Late Onset Alzheimer's Disease (LOAD) from ADNI.	Longitudinal neuroimaging study examining imaging, cognitive testing, neurological evaluation, and biofluid biomarkers of FTD and prodromal FTD in fFTD family members.	Longitudinal neurodegeneration observation study
Study Duration	PSP/CBS subjects: 3 visits over 1 year (baseline, 6m, 1yr) & Controls/vPSP: 4 visits over 2 yrs. (baseline, 6m, 1yr, 2yr)	Cognitively Impaired participant = 2 years Cognitively Normal participant = 1 year	Annual visits for up to 5 years	3 years
Subject Population	PSP/CBS subjects and controls	<u>Cognitively Impaired Cohorts</u> -Diagnosis of MCI due to AD or probable AD dementia -CDR ≤1.0 <u>Cognitively Normal Cohort</u> -MMSE 26-30 -CDR score = 0	Diagnosis of Frontotemporal lobar degeneration (FTLD) syndrome: behavioral variant frontotemporal dementia (bvFTD), primary progressive aphasia (PPA), semantic variant primary progressive aphasia (svPPA), nonfluent variant primary progressive aphasia (nfvPPA), frontotemporal dementia with amyotrophic lateral sclerosis (FTD/ALS), corticobasal syndrome (CBS), progressive supranuclear palsy (PSP) **OR** Member of a family with a strong medical history of an FTLD syndrome	Patients with an established diagnosis of Primary Progressive Aphasia, Posterior Cortical Atrophy, or Alzheimer's Disease
Age	40-85	40-64 (For both groups)	18-90	40-90 years old
Allowed meds	--	--	---	--
Exclusionary Investigational Meds	Putative, disease modifying agent directed at tau (lithium, methylene blue) or anti-coagulants (subjects undergoing LP)	*Investigational agent within 30 days prior to entry *Anticoagulants *Medical radiation defined as nuclear medicine study within 12 months	Current medication likely to affect CNS functions in the opinion of the site PI.	There are no exclusionary medications
MRI/PET/LP	☒MRI ☒PET ☒LP Optional	☒MRI ☒PET ☒LP Optional	☒MRI ☐PET ☒LP Optional	Yes (4) ☒MRI 4 ☒PET 5 ☒LP Optional
Study Status		Virtual		

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To refer patients, please contact the appropriate study site using the contact information below:

Study Name	**LIFT** Link between Inflammation, Executive Function and Treatment-Resistant Depression ***No open label**	**GMDD** Geriatric Mood Disorder Database ***Has open label**	**NRAD** Nicotinamide Riboside, Vitamin B3 dietary supplement	**HDAC imaging** Investigation of Epigenetic Mechanisms in Parkinson's Disease and dementia with Lewy bodies patients Quantified by Non-Invasive PET Imaging
Study Site & Contact	**Forester Lab,** McLean Hospital, Stephanie Wong **SWONG18@PARTNERS.ORG**	**Forester Lab,** McLean Hospital, Stephanie Wong **SWONG18@PARTNERS.ORG**	**Forester Lab,** McLean Hospital Stephanie Wong **SWONG18@PARTNERS.ORG**	**Gomperts Lab,** Anna Goodheart AGOODHEART@PARTNERS.ORG
Sponsor	The Roger's Foundation	The Roger's Foundation	National Institutes of Health (NIH)	
How it works/design	This study aims to assess the relationship between inflammation, attention/executive function, and treatment resistance in older adults with treatment refractory depression. This study will also measure differences in attention/executive functioning in older adults with treatment resistant depression compared with age-matched healthy controls.	This study aims to use correlate non-invasive research methods, including neuropsychological testing and magnetic resonance imaging (MRI), with clinical history to develop a better understanding of markers and predictors of treatment response in older adults with geriatric depression and bipolar disorder. Additionally, we are comparing differences in cognition and functioning during aging in subjects with mood disorders as compared with healthy older adults.	-We are interested in seeing if and how a dietary supplement for Vitamin B3 called Nicotinamide Riboside (NR) causes an improvement in brain energy metabolism and a decrease in cell damage in MCI and mild AD. We will investigate this using a type of brain imaging scan that is able to measure levels of important chemicals in the brain. -At the in-person visits they will be meeting with the GPRP research assistants and a study doctor to complete vitals, safety and neuropsychological scales, blood draws, an MRI and MRS scan. Participants have the option to complete the baseline, 6th , and 12th week follow up ADCS-ADL questionnaire remotely through video telemedicine.	Pilot study; Participants are asked to come in for one study visit, which includes cognitive testing~~, blood work~~, physical exam, and a combo MRI-PET scan.
Study Duration	4-5 hours	36 months	12 weeks	1 visit lasting about 4.5 hours, scan lasts about, 1 hour
Subject Population	Depression Subjects: DSM-5 diagnosis of Major Depressive Disorder; MADRS score of >16 at screening and baseline; Control Subjects: MADRS <4	MDD, Depression NOS, Dysthymia, Bipolar Disorder (Type I or II), Bipolar Depression NOS, Schizoaffective Disorder, or any other mood disorder	Mild Alzheimer's Disease and Mild Cognitive Impairment; CDR Global Score of 0.5 (MCI) or 1.0 (mild AD); MoCA total score of 19-25 (MCI) or 11-21 (mild AD); At least one copy of the APOE ε4 allele	Diagnosis of PD or DLB and healthy controls
Age	55+	55-81 (Inclusive)	55-89 years old (inclusive)	18-80
Allowed meds	Stable dose of antidepressants			--
Exclusionary Investigational Meds/Procedures	Subjects who are taking more than a dose of 1.5 mg per day of Klonopin (Clonazepam) or 3.0 mg per day of Ativan (Lorazepam) or their benzodiazepine equivalents will be excluded from study participation	There are no exclusionary medications	Benzodiazepines, Barbiturates, Antipsychotics medications, mood stabilizing anticonvulsants, Lithium, Anticholinergics, Sedating antihistamines, L-DOPA, any anti-Parkinsonian medication, prior treatment with ant0amyloid immunotherapy, stroke within one year, seizure within prior 10 years, mitochondrial enhancers or antioxidants (vitamin E, carnitine, creatine, vitamin complex B, Co-Q10, N-acetyl cysteine, pramipexole), initiation of treatment or change in dosing of acetylcholinesterase inhibitors (AChEIs) and memantine within 4 weeks of screening, prescription narcotics within 4 weeks of screening, use of niacin (or a supplement with niacin) > 200 mg within the last two weeks prior to study visit.	
MRI/PET/LP	☐MRI ☐PET ☐LP	☒MRI Optional ☐PET ☐LP	☒MRI Optional ☐PET ☐LP	☒MRI ☒PET ☐LP
Reimbursement	$50	$640 (mood) $400 (control)	$85 for the Full Screen (90-minute medical assessment, 45-minute cognitive/functional assessments and blood draw for lab test) 2) $120/visit at the Baseline visit and 6- and 12-week follow-ups (Vitals/blood draw, 100-minute MRI scan and 60-minute cognitive/functional assessment) You will be compensated a total $445 if all study procedures are completed.	Up to $200 for completing all procedures (scans, cognitive assessments, 1 visit

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Study Name	**wAIDP** Web-Based Automated Imaging Differentiation of Parkinsonism	**Asymptomatic** Vascular Pathology in Early and Asymptomatic Cerebral Amyloid Angiopathy	**BLAST Registry** Boston Latino Aging Study	**BLAST Biomarkers**	**Chronic Stress as a Risk Factor for Age-Related Cognitive Decline in Latinos**
Study Site & Contact	**Gomperts Lab,** Anna Goodheart AGOODHEART @PARTNERS.ORG	**Viswanathan Lab,** Vanessa Gonzlaez | vagonzalez@mgh.harvard.edu	**Quiroz Lab,** *Alex Badillo*| abadillocabrera@mgh.harvard.edu	**Quiroz Lab,** *Alex Badillo* | abadillocabrera@mgh.harvard.edu	**Quiroz Lab,** Alex Badillo-Cabrera, abadillocabrera@mgh.harvard.edu
Sponsor		NIH	MAPP	MAPP	MGH ECOR/CDI
How it works/design	Testing an MRI strategy to improve the diagnosis of Parkinson's disease, progressive supranuclear palsy (PSP), and multiple systems atrophy (MSA)	Differences between healthy older individuals and those with Cerebral Amyloid Angiopathy (CAA), a form of stroke-related dementia. We hope to identify signature markers through MRIs, memory/attention testing, and optional spinal fluid samples to learn or about the progression of both CAA and memory loss. This study may be able to determine whether you are at risk of developing CAA.	BLAST:For 2-3 hours participants will complete paper/pencil and computerized assessments	Participants will be asked to complete a total of 8 study visits over the course of five years. This is a longitudinal study with fMRI and PET imaging at baseline and clinical examinations, cognitive testing and blood biomarkers performed at 18-24 and 36-48 months of follow up.	Participants will undergo cognitive evaluation in their primary language (Spanish/English) by a bilingual/bicultural clinical research coordinator. Participants will also complete demographic, acculturation, and health behavior questionnaires, in addition to questionnaire assessing lifetime stress exposure, stress perception, and primary and secondary stress appraisal. To assess hair cortisol concentration (HCC), a small hair sample (~3mm diameter) will be carefully collected by trained staff from the posterior vertex of the scalp.
Study Duration	2 visits, 1 visit with recorded neurologic exam, cognitive testing, and a 30 min MRI scan; 2nd visit one year later for repeat neurologic exam	3 -4 Visits at MGH over 2 years. An MRI scan including fMRI (at baseline and after 2 years), Neuropsychological testing (at baseline and after 2 years), 2 PET scans	2 visits over 3 months	8 visits over the course of 5 years.	1 visit
Subject Population	Diagnosis of PD, PSP or MSA-P	-Has a diagnosis of CAA and subjective memory complaints	Monolingual in Spanish or Bilingual in Spanish/English	Monolingual in Spanish or Bilingual in Spanish/English; English speakers CDR of 0-0.5; MMSE >23	Healthy Volunteers, MMSE 27-30 (CN), MCI
Age	40-80	55+	60-90	55 or older	55 and over
Allowed meds	--	--	--	--	--
Exclusionary Investigational Meds/Procedures		Subject with cerebral amyloid angiopathy who have experienced a large macrobleed/hemorrhage and/or subjects who have no cognitive/memory complaints. Currently pregnant or breastfeeding	*Cholinesterase inhibitors, memantine, and antidepressants are not allowed. *Chronic use of benzodiazepines and anticholinergic medication are not allowed.	A CDR of 1.0 or greater; Dx of dementia -Have not been diagnosed with Alzheimer's disease or another dementia; Contraindications to MRI;Chronic use of benzodiazepines, potent CNS penetrant anticholinergic medications (for bladder control or allergies);Chronic major psychiatric disorders such as schizophrenia; Multiple sclerosis or other autoimmune disorders; Huntington's disease;Post-traumatic dementia or seizures; History of metabolic encephalopathy, CNS infection,hydrocephalus; Cardiovascular disease, stroke, congestive heart failure;Substance abuse within the past 2 years;Active cancer;Active hematological, renal, pulmonary, endocrine or hepatic disorders	Current diagnoses of dementia or psychiatric and substance use disorders, individuals unable to provide hair sample of at least ¼ of a pencil eraser
MRI?	☒MRI ☐PET. ☐LP	☒MRI ☒PET ☒LP Optional	☐MRI ☐PET ☐LP	Yes ☒MRI ☒PET. ☐LP	☐MRI ☐PET ☐LP
Reimbursement	$150 compensation for visit 1, visit 2 TBD	Study participants receive $500 for completion of all study procedures, with parking and lunch costs.	$25 for screen assessments, $25 per cognitive testing and $50 for transportation.	$25 for screening and cognitive testing visits (4), $25 for blood draw, $100 for PET and MRI (2); up to $25 for transportation. $700 total completion study visits	$50
Study Visit Status			In-Person or Virtual	In-Person or Virtual	In-person