# MGH DAP StARR Participating Faculty and Research Focus

#### DEPARTMENT OF MEDICINE

- Margarita Alegria, PhD (Mongan Institute) Mental disorders in minorities and aging populations
- Andrew Chan, MD, MPH (Cancer Center) Small biomarkers in chronic digestive diseases
- John Hsu, MD (Mongan Institute) Health care financing and delivery and the effect on medical quality
- Emily Hyle, MD, MSc (Mongan Institute) Cost-effectiveness analysis
- Hamed Khalili, MD (Gastroenterology) Inflammatory bowel disease
- Peter Miller, MD, PhD (Cancer Center) clonal hematopoiesis, leukemia, PPM1D, stem cells
- Christine Ritchie, MD, MSPH (Mongan Institute) Multimorbidity and advanced illness
- Jason Roh, MD, MPH (Cardiology) Cardiovascular aging biology
- Mark Siedner, MD, MPH (Infectious Diseases) Life and aging in individuals with HIV in rural Uganda
- <u>Alexander Soukas, MD, PhD</u> (*Endocrinology*) Genetics in metabolism and aging in diabetes, obesity, and cancer
- <u>Virginia Triant, MD, MPH</u> (*Cardiology*) Cardiovascular risk in the aging HIV-infected population

## **DEPARTMENT OF NEUROLOGY**

- Mark Albers, MD, PhD (MIND) Olfactory neurodegenerative diseases
- Steven Arnold, MD (MIND) Biomarkers in cerebral spinal fluid and post-mortem brain tissues in AD
- Brian Bacskai, PhD (MIND) Multiphoton imaging techniques for senile plaques in AD
- Oksana Berezovska-Clarizia, PhD (MIND) Molecular events in the synapse in AD
- Rachel Buckley, PhD Sex differences in AD
- Jasmeer Chhatwal, MD, PhD Multi-modal neuroimaging, pharmacology, and genetics in AD
- Sudeshna Das, PhD AD data sciences
- Bradford Dickerson, MD Memory abilities and underlying brain systems in aging, AD, & related disorders
- <u>Teresa Gomez-Isla, MD</u> (*MIND*) Development and characterization of transgenic mouse models of AD and novel therapeutic strategies
- <u>Stephen Gomperts, MD, PhD</u> (*MIND*) PET imaging and optogenetics in Parkinson's disease, dementia with Lewy bodies, and AD
- Steven Greenberg, MD, PhD Hemorrhagic stroke and small vessel brain disease
- Ana Griciuc, PhD Innate immunity genes and CD33 in AD
- Bradley Hyman, MD, PhD (MIND) Neural system failure underlying cognitive loss in AD
- Ksenia Kastanenka, PhD Alzheimer's disease
- Alice Lam, MD, PhD Development and detection of epilepsy and AD
- Gad Marshall, MD Alzheimer's disease
- Lidia Maria Vera Rocha de Moura, MD, MPH (MIND) Health services research, quality improvement
- Reisa Sperling, MD (MIND) MRI and PET amyloid imaging in mild cognitive impairment and AD
- Rudolph Tanzi, PhD (MIND) Alzheimer's disease
- Susanne Van Veluw, PhD Cerebral small vessel disease
- Anand Viswanathan, MD, PhD Stroke and vascular factors contributing to cognitive impairment and dementia
- <u>Can (Martin) Zhang. MD, PhD</u> (*MIND*) Identification of molecular targets and biomarkers in AD treatments

#### OTHER MGH DEPARTMENTS

- Iman Agani, PhD (Radiology) Neuroimaging
- <u>Jean Augustinack, PhD</u> (*Radiology*) Neuroanatomical & neuroimaging of medical temporal lobe in the human brain in AD
- Marta Bianciardi, PhD (Radiology) Brainstem imaging across the lifespan and in diseases
- <u>Deborah Blacker, MD, ScD</u> (*Psychiatry*) Epidemiology, genetics, assessment, & early recognition of AD
- Zhixun Dou, PhD (Regenerative Medicine) Nuclear events in age-associated diseases and cancer
- <u>Bruce Fischl, PhD</u> (*Radiology*) Modeling the human cerebral cortex
- <u>Matthew Frosch, MD, PhD</u> (*Pathology*) Pathology of cerebral amyloid angiopathy using mouse models and human tissue
- Lei Gao, MD (Anesthesia) Delirium, AD, sleep/circadian rhythms
- <u>Jill Goldstein, PhD</u> (*Psychiatry*) Sex differences in the brain and schizophrenia; disorders of the brain and brain aging; comorbidity with CVD
- Susie Huang, MD, PhD (Radiology) Advance MRI
- Heidi Jacobs, PhD (Radiology) Early detection of AD, aging, and neuroimaging
- Julie Price, PhD (Radiology) PET modeling in neurodegenerative diseases and diabetes
- Yakeel Quiroz-Gaviria, PhD (Psychiatry) Brain changes predisposing to memory loss and dementia in AD
- Chongzhao Ran, PhD (Radiology) Development of next-generation amyloid imaging probes
- Gary Ruvkun, PhD (Molecular Biology, HMS) Metabolism and aging using C. elegans
- <u>David Salat, PhD</u> (*Radiology*) Structural and functional in aging and age-associated neurodegenerative diseases
- Shigian Shen, MD, PhD (Anesthesia) Neuro-immune interactions
- Changning Wang, PhD (Radiology) Biomedical imaging
- Zhongcong Xie, MD, PhD (Anesthesia) Post-operative cognitive dysfunction and AD in older patients
- Yiying Zhang, MD, PhD (Anesthesia) AD gut microbiota, mitochondrial dysfunction, neurotoxicity, neuroinflammation

### **HEBREW SENIOR LIFE INSTITUTE OF AGING**

- <u>Sarah Berry, MD, MPH</u> (*Musculoskeletal*) Outcomes following hip fractures in community and nursing home setting
- <u>Corey Fehnel, MD, MPH</u> (*Palliative Care*) Outcomes among older persons with critical neurological illnesses
- Sharon Inouye, MD, MPH (Aging Brain Center) Delirium & functional decline in hospitalized older patients
- <u>Dae Kim, MD, ScD, MPH</u> (*Mobility & Falls*) Frailty, geriatric pharmocoepidemiology, and pre-operative geriatric assessment
- <u>Lewis Lipsitz, MD</u> (*Mobility & Falls*) Blood pressure regulation and development of falls and syncope in the aged patients
- Brad Manor, PhD (Mobility & Falls) Brain function, balance, and falls in older adults
- Alvaro Pascual-Leone, MD, PhD (Mobility & Falls) Maintenance of brain health across the lifespan
- <u>Thomas Travison, PhD</u> (*Biostatistics*) Development of tools facilitating rigorous and reproducible observational and interventional research in aging

# INTERESTED IN SOMEONE NOT LISTED HERE? MENTORS WOULD NEED TO BE ADDED TO THE R38 GRANT

It is possible to add a mentor not listed above. These individuals were selected based on NIA funding and listed in the grant application. Typically, the Internal Steering Committee is willing to have an outside mentor if [1] the research project is relevant to the National Institute of Aging (NIA), [2] they have funding to support research efforts, and [3] the individual is willing to mentor the resident.

For more questions or interest in becoming a mentor in the MGH DAP StARR program, please contact the Program Manager (Becca Ward, <a href="mailto:raward@mgh.harvard.edu">raward@mgh.harvard.edu</a>).