

The background of the entire page is a repeating pattern of green, stylized leaves or fern fronds. The leaves are drawn with fine, parallel lines, giving them a delicate, textured appearance. They are scattered across the white background, with some larger and more prominent than others.

Medical Student Training in Aging Research (MSTAR) Program at

Icahn School of Medicine at
Mount Sinai

2021 Research Mentors

**MSTAR RESEARCH
MENTOR**

RESEARCH INTERESTS AND POTENTIAL PROJECTS

Melissa Aldridge



Dr. Aldridge is a health services researcher whose body of work examines patterns of hospice use, transitions in care at the end of life, and the financial incentives inherent in the Medicare Hospice Benefit payment structure.

Student projects could focus on a wide range of research interests in geriatrics and palliative care, particularly around end-of-life care. Our team utilizes the Medicare Current Beneficiary Survey data, which is a large, population-based dataset that is nationally representative of the US Medicare population (both fee-for-service and Medicare Advantage populations) from 2002-2018. The dataset includes information regarding an individual's demographics, socioeconomic status, clinical and functional characteristics, healthcare use and spending. There are approximately 15000 individuals per year in the dataset, followed for up to 4 years and roughly 500 decedents per year. Potential projects could focus on a specific sample defined by disease (cancer type, dementia, etc.), healthcare service (hospice, home health, hospital use), setting (nursing home, community, assisted living facility) or a specific time period or longitudinal trend. I look forward to meeting with you and brainstorming projects based on your interest.

Claire Ankuda



Dr. Ankuda is a health services researcher who examines how Medicare payment policies and health system characteristics shape the care of older adults with serious illness and their families.

Student projects include examining the end-of-life experience across those from diverse health trajectories, social and demographic groups, and regional settings. This allows for students to examine policy and social factors that shape the quality of care at the end of life. For example, prior research has found lower friend/family reported quality of end-of-life care for decedents in Medicare Advantage plans and ongoing work is examining disparities in quality of care reported by the friends and families of Asian American older adults. In addition, I am interested in the experience of older adults and their families at the onset of new functional disability (needing help with walking or self-care). This is a sentinel event in a person's life, often unobserved by the health system. I'm interested in how place and context shape outcomes after functional disability.

Matt Augustine

Dr. Augustine's research focuses on understanding and enhancing access to care through quantitative and qualitative assessment of ongoing care delivery, including for homebound populations.

Please contact Research Mentor for project specifics.

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Abigail Baim-Lance



Kenneth Boockvar



Jerry Chipuk

Dr. Baim-Lance's research has two focus areas: (1) to study the healthcare experiences of aging, vulnerable, and high healthcare utilizing individuals and populations with chronic complex needs, to develop strategies and systems that better meet their needs; and (2) to use implementation science to identify strategies, factors and processes to help healthcare organizations become patient-centered and patient-partnered to enable a strong, 'co-produced' healthcare system. Dr Baim-Lance focuses on qualitative and mixed methods approaches in her research.

Projects may focus on data collection for a proposed pilot study to describe COVID-19 related systems changes and effects on patient experiences and outcomes; analysis of survey data describing referral challenges for older individuals living with HIV and other comorbidities; development of telehealth/virtual care approaches to routine care management for chronic illness.

Dr. Boockvar is a health services researcher who focuses on transitions between sites of care, medication safety, and changes in health in long-term care patients.

Better Assessment of Illness: Delirium Severity Measures for Person with and without Dementia (BASIL II). The goal of this project is to develop and validate delirium severity instruments for those with and without Alzheimer's disease in a cohort drawn from 3 unique yet complementary sites. We are running the nursing home site and hope to be enrolling and assessing patients at the Jewish Home, which is the academic nursing home affiliate of Mount Sinai.

My laboratory's long-term goals are to provide: (1) mechanistic insights of how mitochondrial composition and shape impact on cellular metabolism and commitment to apoptosis, (2) explore how cancer-promoting pathways converge on mitochondrial function to regulate malignancy and chemotherapeutic success, and (3) to reveal novel contributions of the mitochondrial network in tissue homeostasis.

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My laboratory developed multiple model systems, collaborations, and experimental tools to better understand the intersections between mitochondria, cell biology, and disease (often melanoma). Our unique experimental approaches and outstanding scientific environment (i.e., state-of-the-art lab space, departmental equipment, core facilities) and manuscripts have generated a lineage of scientists (>40 trainees), and consistent presence at local/national/international venues, along with recruiting funding from multiple foundations and agencies.

Stephanie Chow



Dr. Chow's research is looking to evaluate the program effectiveness of a new model of geriatric care. The Acute Life Interventions, Goals & Needs Program (ALIGN) at Mount Sinai is an inter-professional team of 3 clinicians (physician and nurse practitioner) and 2 social workers (social worker and care coordinator), dedicated to offering intensive ambulatory care services to complex elderly patients at high-risk for incurring expensive health care system use.

Student projects could include both qualitative and quantitative research methods of program evaluation. This would include extensive chart review and data entry, survey administration (patients, physicians, caregivers), observership of team members in their roles, and occasional team meetings. Students would be expected to submit an abstract to a national conference for their project.

Bevin Cohen



Dr. Cohen is a nurse and epidemiologist whose research focuses on infection prevention and control as well as palliative and end-of-life care for vulnerable adults with multiple chronic conditions.

(1) Assist research team in coding and analysis of qualitative data in a study to understand (a) how care decisions are made for hospitalized patients who lack decisional capacity, surrogate decision makers, and advance directives, and (b) the circumstances that lead patients to be in this situation.

(2) Assist research team in coding and analysis of qualitative data in a study to understand the palliative care needs of community dwelling patients with multiple chronic conditions.

(3) Assist research team in quantitative data collection and analysis in a study to evaluate the efficacy of a primary palliative care model for community dwelling adults with multiple chronic conditions.

Linda DeCherrie

Dr. DeCherrie's research focuses on evaluating innovative models of home-based primary care, palliative symptom management, and home-based acute care.

Please contact Research Mentor for project specifics.

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Kavita Dharmarajan

Dr. Dharmarajan's research focuses on integrating components of palliative care to align decision-making in the process of palliative radiation therapy planning for older adults.

Please contact Research Mentor for project specifics.



Alex Federman

Dr. Federman's research focuses on issues that complicate the outpatient management and primary care of older adults with chronic illness.

1) automated voice analysis and natural language processing to identify patients with cognitive impairment in primary care; 2) self-management support intervention, led by community health workers, to promote better outcomes for older adults with pulmonary diseases; 3) impacts of low health literacy, cognitive impairment, and health-related beliefs on self-management of chronic diseases among older adults



Emily Franzosa

Dr. Franzosa's qualitative research is at the intersection of health policy and health equity, with a specific focus on supporting frontline healthcare workers delivering care in the home.

- Examination of disruption of home-based primary care due to COVID-19 (Ornstein)
- Qualitative analysis of veterans' home care networks, including the intersection of paid and unpaid care

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Laura Gelfman



Dr. Gelfman's research focuses on examining the role of palliative medicine for patients with advanced heart failure.

Validating the AMBS Hospice and Palliative Medicine Registry for Palliative Medicine Consultation Using Medicare Claims.

Nate Goldstein



Dr. Goldstein is a clinician-investigator whose work examines novel models of home-based palliative care for patients with serious illness.

We have completed a trial of a novel home-based palliative care interventions for patients with serious illness. Potential projects include analyzing portions of the data from this project.

Patrick Hof



Dr. Hof's research investigates selective neuronal vulnerability in neuropsychiatric illnesses using classical neuropathological and modern quantitative cell biology methods.

Investigation of selective neuronal vulnerability in brain aging and Alzheimer's disease using multiplexing immunofluorescence approaches to quantify markers expression at the regional, laminar and cell type levels of resolution in postmortem human brain specimens. The project involves a deep dive into the fine structural anatomy of the human cerebral cortex, advanced microscopy, and use of software analyses based on machine-learning tools.

Work on on-going project using a similar approach to characterize cellular and synaptic changes in the prefrontal and visual cortex of behaviorally characterized old macaque monkeys. This work is coupled to quantitative 3D electron microscopy analyses of synaptic alterations during aging as well as changes in axonal integrity, myelin structure, glial reaction, and changes in the microvasculature.

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William Hung



Dr. Hung's research focuses on geriatric models of care to improve care delivery for older adults, including the Mobile Acute Care for the Elderly Team model (MACE).

Geriatrics teleconsultation and education to rural older Veterans: Virtual geriatrics project with a nationwide scope; Medication optimization and deprescribing in older veterans; Teleconsultation to home for medication reconciliation and optimization

Amy Kelley



Dr. Kelley's research includes identifying older adults at risk of potentially avoidable, high-cost, hospital-based treatment, as well as exploring factors associated with health-related, out-of-pocket costs for older adults with serious illnesses.

Student projects could include use of existing survey and claims data sources to better understand the experiences of and challenges faced by people with serious illness and their families, particularly those with dementia.

Fred Ko



Dr. Ko's research focuses on the biology of frailty and surgery-induced stress and their intersection with adverse outcomes such as physical decline in aged organisms.

To participate in a clinical study that investigates hospitalization-associated multisystem physiologic alterations that may be predictive of post-hospitalization syndrome in older adults.

Charles Mobbs



Dr. Mobbs's lab focuses on elucidating the molecular mechanisms mediating the protective effects of dietary restriction to delay essentially all age-related diseases

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R. Sean Morrison



Dr. Morrison's current research focuses on improving the management of pain in older adults and on developing and evaluating models of palliative care delivery in hospitals and the community.

Please contact Research Mentor for project specifics.

Katherine Ornstein



Dr. Ornstein is a social epidemiologist whose research interests include caregiving, symptom burden, and home-based primary and palliative care.

Student projects underway include:

- (1) Examination of disruption of home-based primary care due to COVID-19.
- (2) We are also currently evaluating our expansion of telehealth utilization among the homebound within the Mount Sinai Visiting Doctors Program including examining disparities in access to telehealth.
- (3) We are also engaged in several projects to examine homebound status and use of home-based clinical services on older adults and their caregivers using large scale national datasets.

Jennifer Reckrey



Dr. Reckrey's work examines team-based approaches to care for those with serious illness, with a focus on the paid caregivers providing hands-on assistance to those with dementia living at home.

See project 2 under Ornstein above.

Albert Siu



Dr. Siu, who served as the Department Chair from 2003-2017, has dedicated himself full-time to building and leading Mount Sinai at Home, the nation's most ambitious program of its kind.

Please contact Research Mentor for project specifics.

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Cardinale Smith



Dr. Smith is a health services and outcomes researcher working at the intersection of oncology and palliative medicine with a special emphasis on minority populations.

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Christopher Woodrell



Dr. Woodrell researches the delivery of palliative care to seriously ill patients and their families, with a focus on those facing advanced liver disease and liver cancer.

Descriptive study of palliative care received by hepatocellular carcinoma patients at Mount Sinai (chart review with mixed quantitative and qualitative data collection and analysis)

Carolyn Zhu



Dr. Zhu's research focuses on the costs of long-term care for older people with chronic or life-limiting illness, especially those with dementia.

Several potential student projects include (1) examining the natural history of cognitive and behavioral symptoms in Alzheimer's disease and related dementias using the National Alzheimer's Coordinating Center Uniform Data Set (NACC-UDS), a national database consisting of more than 40,000 participants followed approximately annually from 39 past and present NIH/NIA funded Alzheimer's Disease Centers (ADCs) with detailed, standardized clinical evaluations, genomic data, neuropathology data when available, and now MRI imaging, (2) systematic review of utilization of Alzheimer's Disease Cooperative Study-Activities of Daily Living Scale (ADCS-ADL) in clinical trials and studies. The first project requires the student to have had basic training in statistical analysis and programming.