

**University of California, Los Angeles (UCLA)**  
**Claude D. Pepper Older Americans Independence Center**

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**I. DESCRIPTION OF CENTER**

The UCLA Claude Pepper Older Americans Independence Center (OAIC) is designed to maintain and restore the independence of older persons. The UCLA Center's theme is "*Preventing Disease and Disability in Vulnerable Populations: a Translational Approach*".

We define vulnerable populations as 1) underserved (i.e., low income, uninsured, and minorities) or 2) at increased risk of losing independence because of chronic diseases or conditions, advanced age, or functional impairment. We define translational as overcoming two barriers to effective research. The first is the inability to transfer new understandings of disease mechanisms gained in the laboratory into new diagnostic, therapeutic, and preventive care. The second is the inability to get results from clinical studies into everyday clinical practice and health decision making. In studying vulnerable populations, the UCLA OAIC emphasizes research that extends across the full spectrum of translational research. Within this theme, an important focus of the UCLA OAIC is on understanding the role of inflammation in disease and disability.

The UCLA OAIC addresses health disparities that vulnerable older persons face because of 1) inadequate understanding of contributors (e.g., socioeconomic status, inflammation) to health and specific illnesses (e.g., HIV, sleep disorders, depression), 2) lack of effective preventive or therapeutic approaches (biomedical and behavioral), or 3) inadequate ability to get needed treatment to vulnerable older populations (e.g., cultural barriers, ineffective health systems). It also helps overcome the barriers between the promise of basic science research and the delivery of better health.

The Center stimulates scientific discovery through 4 Resource Cores:

- Recruitment and Retention Core
- Research Operations Core
- Analysis and Cost-effectiveness Core
- Inflammatory Biology Core

Resource Cores provide 4 levels of support:

- Consulting (e.g., few hours of advice, reading a paper or proposal)
- Ongoing or long term partnership (e.g., via purchasing their services)
- Partnership on new proposals
- Additional research support for CDA's to be decided on a case-by-case basis

The UCLA OAIC specific aims are:

- 1) To provide intellectual leadership for research on the Center's theme, *Preventing Disease and Disability in Vulnerable Populations*
- 2) To stimulate T1 and T2 translational research addressing the Center's theme by consultation, provision of services, and collaboration through 4 resource cores
- 3) To engage the Los Angeles community in the conduct of OAIC research
- 4) To foster career development of future research leaders through Career Development Awards
- 5) To nurture novel ideas by funding rapid pilot awards
- 6) To collaborate with other NIH-funded (e.g., CTSA, RCMAR, L.A. CAPRA, Demography Center) and foundation-funded (e.g., Hartford Center of Excellence) efforts that support the UCLA OAIC's mission

## **II. RESEARCH, RESOURCES AND ACTIVITIES**

### **A. CORES**

- A1. Leadership/Administrative Core
- A2. Research Career Development Core
- A3. Pilot and Exploratory Studies Core

#### **A1. Leadership/Administrative Core (LAC)**

Core leader:

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Core Co-leaders:

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The LAC provides support for planning, organizational, evaluation, and administrative activities related to the other Cores and to the OAIC as a whole. It monitors, stimulates, sustains, evaluates, and reports progress towards the Center's overall goals. To do so, the LAC has established eight specific aims:

- 1) to provide day-to-day management of the UCLA OAIC
- 2) to provide fiscal management for the UCLA OAIC
- 3) to provide administrative oversight for internal quality control of ongoing research and training
- 4) to review and optimize use of UCLA OAIC resources by internal and external projects
- 5) to create linkages between UCLA OAIC Cores/investigators and other UCLA, VA, and RAND researchers whose work relates to the theme and mission of the Center, especially the new UCLA CTSI and the UCLA Research Center for Minority Aging Research (RCMAR)
- 6) to solicit applications for new Career Development Awards (CDAs) and pilots and coordinate the review process for new CDA, pilots, and Developmental Projects (DPs)
- 7) to ensure communication, coordination, and collaboration among the UCLA OAIC cores, (intra-OAIC) and between the UCLA OAIC and other OAICs (inter-OAIC)
- 8) to maintain contact with NIA staff, the national OAIC Coordinating Center, the External Advisory Board, and External Selection Panel

**A2. Research Career Development Core (RCDC)**

Core leader:

Alison A. Moore, MD, MPH  
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Core co-leader:

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The overarching mission of the RCDC is to develop future leaders in aging research, focused in the area of UCLA's theme, *Preventing Disease and Disability in Vulnerable Populations: a Translational Approach*. The RCDC promotes the development of future research leaders who address this theme, particularly leaders who can integrate clinical insights regarding health, disease, independence, and disability in older adults with knowledge of advances in the basic sciences, including gerontology, to develop better interventions to maintain health and independence.

The goals of the RCDC are to:

- 1) identify junior faculty who have the greatest potential as future leaders in aging research to receive three year career development awards (CDAs), focused on our OAIC theme;
- 2) foster the research training and careers of these junior scientists;
- 3) provide a supportive environment for CDA awardees that maximizes the likelihood of successful training, research progress and ultimate career success;
- 4) emphasize training for most CDAs that will integrate translational science in addressing research questions; and
- 5) serve as a resource in aging-related research mentorship for UCLA junior faculty.

### **A3. Pilot and Exploratory Studies Core (PESC)**

Core leader:

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The overarching purpose of the UCLA Pilot and Exploratory Studies Core (PESC) is to promote innovative basic, clinical and translational research, conducted by collaborating teams of junior and senior investigators, that falls within the UCLA's research theme and carries out the Center's goals. Each pilot study will meet at least one of the following goals:

- a) To provide preliminary studies on which subsequent, larger basic or clinical investigations will be based;
- b) To develop new basic or clinical methodologies that surmount critical barriers to progress in a given discipline, thus opening new research avenues;
- c) To develop novel multi-disciplinary research approaches to complex geriatrics research questions;
- d) To accomplish bi-directional basic and clinical sciences translation; or
- e) To identify diagnostic and/or treatment strategies that bring discoveries to the bedside in order to improve health and optimize function of geriatric patients.

## Specific Aims

1. To administer a rapid pilot program, fast-turn-around awards of \$1,000 to \$10,000 each, targeted at junior faculty, advanced trainees whose research will be advanced by a small infusion of support quickly and to senior faculty who wish to add a specific aging focus to their ongoing work.
2. To closely monitor progress of rapid pilots and to promptly identify and remediate obstacles to each pilot's successful completion.
3. To provide mentoring and infrastructural support that will foster development of rapid pilot projects into presentations at national meetings, peer-reviewed manuscripts and independent grant awards.

## **B. RESOURCE CORES**

- B1. Analysis/Cost-Effectiveness Core (ACEC)
- B2. Inflammatory Biology Core (IBC)
- B3. Recruitment Core (RC)
- B4. Research Operations Core (ROC)

### **B1. Analysis/Cost-Effectiveness Core (ACEC)**

#### Core leader:

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The Analysis and Cost Effectiveness resource core (ACEC) provides broad, technical, analytic support in biostatistical methods, comparative effectiveness methods, and cost effectiveness analysis to UCLA aging researchers to help identify modifiable causes and pathways to morbidity and disability in vulnerable populations, and develop interventions that address these causes and pathways.

The Specific Aims of the Analysis/Cost-Effectiveness Core are:

1. To provide analytic support in research study design (selection of analytic strategy, and sample size/power issues), statistical data analysis; and interpretation and accurate description of findings, for:
  - OAIC Career Development Awardees,
  - OAIC supported pilots and development projects,
  - UCLA junior researchers conducting research that meets UCLA OAIC mission, theme, and goals,

- Externally funded UCLA research projects that meet the UCLA OAIC mission, theme, and goals (See below for list of external projects that will purchase core support in the first year).
2. To provide training workshops / tutorial seminars to UCLA aging researchers on state-of-the-art methods for statistical data analysis, comparative effectiveness studies, and cost effectiveness analysis, specifically tailored to data from older adults.

## **B2. Inflammatory Biology Core (IBC)**

### Core leader:

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### Core co-leader:

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The OAIC Inflammatory Biology Core (IBC) provides a mechanism by which OAIC research programs at UCLA and other institutions can incorporate comprehensive protein and molecular analyses of inflammatory biology into both internally funded and external projects. Consistent with the OAIC Center's theme *Prevention of Disability in Vulnerable Populations: A Translational Approach*, the IBC aims to: a) stimulate translational links between basic and clinical research in inflammatory biology, b) develop effective preventive or therapeutic interventions that target inflammation or biobehavioral risk profiles associated with inflammation, and c) bring new knowledge about inflammatory biology biomarkers and mechanisms underlying successful clinical intervention into clinical practice and decision-making. The IBC focuses on the linkages between basic and clinical sciences, and provides opportunities for OAIC research projects to examine inflammatory mechanisms, underlying molecular genetics, and role of inflammation on biobehavioral, systemic, and cellular processes. Together, the IBC provides strategic focus on the translation of such inflammatory biology mechanisms into the identification of chronic disease risk in older adults and prediction of response to treatment. A single, comprehensive core in inflammatory biology yields substantial gains in efficiency and quality for the individual external projects supported by the IBC.

The OAIC Inflammatory Biology Core aims to:

1. Expand and support the analysis of inflammatory biology in existing UCLA OAIC research programs and in new OAIC pilot projects and developing research programs. This includes both intellectual support and assay services.
2. Develop new analytic approaches to facilitate in vivo analysis of inflammatory dynamics and their functional genomic impact on elderly individuals.
3. Provide training in behavioral, immunologic, and molecular aspects of inflammatory biology in general, and specifically, as they pertain to the unique issues in aging. This training emphasizes biological knowledge about the sources and targets of inflammatory signals (including genetic and epigenetic influences and gene expression consequences), with a particular focus on behavioral and functional impacts.

### **B3. Recruitment and Retention Core (RRC)**

Core leader:

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With the UCLA OAIC's theme of "Preventing Disease and Disability in Vulnerable Populations: a Translational Approach," our Recruitment and Retention Core (RRC) provides a critical piece of our OAIC's mission by facilitating recruitment and retention of the most vulnerable seniors – specifically lower income and minority seniors who have been historically and continue to be underrepresented in research studies. To successfully enroll these seniors into research protocols, scientists need to build trusting mutually beneficial relationships with community leaders. This is a process that takes many years and is not generally accomplished within the confines of a typical RO1 (or equivalent type of grant) timeline or budget. For over 15 years, our academic scientists have worked in close partnership with many community leaders in aging on community-based projects aimed at improving the health and quality of life of lower income older adults. With appreciation of our complementary expertise, our academic-community partnerships are based on deep mutual respect and a shared vision for implementing and testing practical evidence-based interventions to empower older adults to stay active and healthy. Capitalizing upon these relationships, the UCLA OAIC RRC has provided invaluable assistance and leadership to academic investigators seeking to enhance the reach and impact of their funded science.

### Specific Aims:

1. Collaborate with UCLA, Charles Drew University (Drew) and affiliated academic investigators to accelerate and facilitate recruitment and retention of lower income and minority seniors.
2. Facilitate new partnerships between community partners and affiliated scientists directed at conducting community research focused on preventing disease and disability in vulnerable older adults.

### **B4. Research Operations Core (ROC)**

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#### Core co-leader:

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The Research Operations Core (ROC) provides state-of-the-art data collection and data management services to support the successful implementation of OAIC-funded and externally-funded projects addressing questions relevant to the UCLA OAIC's theme *Prevention of Disability in Vulnerable Populations: A Translational Approach* – a focus that flows from the substantive interests and expertise of UCLA OAIC-affiliated researchers. ROC faculty and staff expertise, and our ability to field data collection modalities suited to a variety of community settings, are key to our success in implementing projects in such populations. Since its inception in 2000, the ROC has developed a reputation for excellence in data collection and data management services, having successfully supported close to 120 observational and intervention projects to date. The ROC maintained its status as a premier research resource through on-going efforts to leverage developing technologies and available expertise to enhance the services offered in support of successful implementation of studies in diverse, vulnerable populations. The ROC's overarching goal is to optimally support the full spectrum of research operations services needed for the successful design and implementation of projects ranging from basic science to population-based studies and thereby contribute to the success of the UCLA OAIC in supporting translational research to maintain older adults' independence, especially among vulnerable populations.



ROC Specific Aims include:

1. Research Operations Services – Provide consulting for:

(a) Data collection – provide assistance in development of data collection procedures, manuals of operations and instruments as well as training and oversight of research staff;

(b) Data management – provide on-going monitoring/tracking of subject recruitment and study progress; quality control monitoring; double-pass data entry, data cleaning and documentation; and data security procedures to ensure confidentiality/privacy; and

(c) Proposal preparation - provide consulting and assistance with scientific and operational aspects as proposals are prepared;

2. Innovation/New Initiatives – Expand and enhance ROC services through:

(a) developing interoperability between ACCESS and Web versions of the Pepper Informatics (Pi) data management systems and between Pi and REDCap, the data entry system supported by the national CTSI program, to allow seamless exchange of data between all modalities of Pi and REDCap;

(b) deepening our collaborations with the UCLA CTSI, including joint efforts to enhance community-based data collection protocols, to evaluate and enhance data management systems, and efforts to encourage and facilitate participation in research by vulnerable populations;

3. Training – Provide workshops on research methods and operations for research faculty (through participation in OAIC Seminar Series) and for staff, often through collaboration with other cores;

4. Support for Externally-Funded Projects.

## C. PILOTS

YEAR 10 (JULY 2015 – JUNE 2016)

### Rapid Pilots:

Rapid pilots awarded July 1, 2015 through June 30, 2016		
Principal Investigator (Mentor if Junior PI)	Title of Pilot	Research Aims
Theodoros Kelesidis, MD, PhD Assistant Professor, Dept. of Medicine, UCLA  (Otto Yang, MD, Professor of Medicine)	Ex vivo/in vitro studies of novel therapeutics for HIV-related accelerated aging	To define the direct effects of oxidized lipoproteins (present in chronic treated HIV) on mechanisms important for aging such as cellular senescence, apoptosis and mitochondrial function using T cells from HIV-1-infected and uninfected older persons.
Ramesh Halder, PhD Assistant Project Scientist, Dept. of Medicine, UCLA  (Ram R. Singh, MD, Professor of Medicine and Pathology)	Impact of Aging on Hydrocarbon Oil-induced Pulmonary Vascular Inflammation and Alveolar Hemorrhage	Does the age of mice influence the immune and clinical-pathological outcome of exposure to certain hydrocarbon oils?  Are older mice better models to study immune inflammatory effects of hydrocarbon oils, and for inflammatory disorders that are generally more severe and have poorer outcomes in elderly humans?
Zhenqi Zhou, PhD Postdoctoral Fellow, Dept of Medicine, UCLA  (Andrea Hevener, PhD, Associate Professor of Medicine)	The role of DJ1 in regulating metabolic homeostasis, adiposity, and inflammation with aging	Test the role of DJ1 in adipogenesis and inflammation in white adipose tissue during aging. (DJ1 is a loss-of-function gene mutation in one of the familial Parkinson's genes, DJ1. This mutation is associated with a wasting phenotype marked by a reduction in muscle and adipose tissue mass) Investigate the role of DJ1 in adipose tissue browning with aging.

### **III. CAREER DEVELOPMENT AWARDS**

#### **Joseph Dzierzewski PhD (2013 – 2016)**

Assistant Researcher, UCLA Department of Medicine

#### **Cognitive response to improved sleep in late-life: the role of inflammation**

Sleep disordered breathing (SDB) and insomnia are the most common sleep disorders in late-life, and recent evidence suggests that these two disorders co-occur in nearly half of patients. SDB and insomnia have been independently associated with cognitive complaints cross-sectionally in younger and middle-aged samples; however, there is a relative dearth of information concerning the combined impact of these disorders on cognitive functioning, especially in older adults. Little is known about potential pathways through which disturbed sleep may impact cognitive functioning in late-life, though alterations in inflammatory factors are a promising candidate. Both SDB and insomnia have known inflammatory consequences, which also have known associations with late-life cognitive functioning.

**Aim 1:** Examine the cross-sectional relationships between sleep and neurocognitive functioning, and explore the role of inflammatory factors.

**Aim 2:** Determine whether a novel Cognitive Behavioral Treatment for Insomnia + Positive Airway Pressure treatment improves neurocognitive functioning and inflammation in older adults with comorbid SDB and insomnia.

**Aim 2.1:** Examine the effects of improved sleep on neurocognitive functioning and inflammatory factors in older adults with comorbid SDB and insomnia.

#### **Lee Jennings, MD (2013 – 2016)**

Assistant Professor of Medicine/Geriatrics

#### **Evaluation of a comprehensive dementia care program: quality, health outcomes, cost and utilization**

Dementia is a chronic disease that requires well-integrated medical and social services to provide high quality care and prevent complications, including ED visits and hospitalizations for ambulatory sensitive conditions. In July 2012, UCLA launched the Alzheimer's and Dementia Care (ADC) program, a quality improvement program that uses a co-management model with nurse practitioner Dementia Care Managers partnering with primary care physicians and five community-based organizations to provide comprehensive dementia care.

The program has enrolled over 1750 patients in 4 years. Based on the Centers for Medicare and Medicaid Services triple aim (better quality, better health, and lower cost), we propose a rigorous evaluation of this new model of care for dementia disease management.

Specifically, we aim to evaluate how well the UCLA Alzheimer's and Dementia Care Program:

1. Provides better quality of dementia care  
Hypothesis: The quality of care as measured by adherence to the Assessing Care of Vulnerable Elders (ACOVE)-3 and Physician Consortium for Performance

Improvement (PCPI) quality indicators for dementia will be better for program enrollees as compared to literature benchmarks for similar populations of community-dwelling adults with dementia.

2. Improves patient and caregiver health outcomes

Hypotheses:

2a: Neuropsychiatric complications for ADC enrollees, as measured by the Neuropsychiatric Inventory Questionnaire (NPI-Q), will worsen at a slower rate as compared to a national cohort of dementia patients. The ADC program is designed to improve management of dementia-related behaviors, leading to fewer neuropsychiatric complications and less caregiver distress despite progression of cognitive and functional impairment.

2b: Caregiver strain, depressive symptoms, and self-efficacy for managing dementia-related problems and accessing help as measured by the Modified Caregiver Strain Index, Patient Health Questionnaire (PHQ-9), and a new 9-item caregiver survey assessing caregivers' experience with dementia care and perceived needs, respectively, will improve as compared to baseline measures.

3. Decreases hospital, emergency department (ED), and nursing home utilization; increases hospice utilization; and is cost-effective for enrollees as measured by Medicare claims data

Hypotheses: ADC program enrollees will have a slower rate of increase in costs and acute care utilization as compared to a cohort of UCLA dementia patients not in the ADC program. Although, patients with dementia are likely to have increased health care use as their disease progresses, ADC program interventions, including better management of neuropsychiatric complications, caregiver education and support, and better advance care planning, will reduce unnecessary ED visits and hospitalizations and increase hospice use, thus slowing the rate of cost increase as patients' dementia progresses.

**Joanna Schaenman, MD, PhD (2014-2016)**

Assistant Professor of Medicine/Infectious Diseases

**Evaluation of T Cell Immune Function Impairment in Elderly Solid Organ Transplant Recipients**

Project Goals

Kidney transplant recipients older than 65 years old are at increased risk of death compared with younger transplant recipients, hypothesized to be due to alterations in T cell immunity leading to vulnerability to infection. However, although evaluation of the immunologic changes associated with aging is a growing field, this topic has yet to be examined in transplantation. As the incidence of chronic kidney disease rises in the aging population, the number of elderly patients requiring transplantation will continue to increase. Kidney transplant recipients are an ideal group to study due to the high volume of transplant recipients available for clinical trial enrollment at our center.

The current approach to immune suppression after transplantation targets goal drug levels regardless of patient age. By studying alterations in T cell function found in the peripheral circulation in elderly and younger renal transplant recipients in Aim 1, we will reach an improved understanding of the mechanism of immune dysfunction in terms of senescence, exhaustion, and antiviral immunity. To unravel the mechanisms behind these changes, Aim 2 will explore differences in peripheral blood T cell gene expression profiles in elderly versus younger transplant recipients. Aim 3 will apply novel computational bioinformatics to integrate the large immunophenotyping and gene expression datasets generated from these analyses to generate a composite phenotype of the immune compromised elderly renal transplant recipient. The deliverables from this project will be mechanistic analyses of immunosenescence in elderly transplant recipients and the development of biomarkers for noninvasive testing that can be applied to optimize post-transplant immune suppression and monitoring. **Hypothesis:** Elderly kidney transplant recipients will demonstrate increased frequency of T cells characterized by immunosenescence, terminal differentiation, and deficiencies in antiviral immunity, as compared with younger transplant recipients.

### **Specific Aims:**

**Aim 1: Characterize the T cell immune phenotype and function of elderly kidney transplant recipients as compared with younger transplant recipients longitudinally post-transplant.**

**1A:** Determine the peripheral T cell immunophenotype using markers of immunosenescence and terminal differentiation via multiparameter flow cytometry.

**1B:** Characterize the quality and quantity of the T cells mediating immune response to CMV by measuring intracellular cytokine secretion after *in vitro* stimulation with CMV.

**Aim 2: Determine the mechanism(s) of development of age-related T cell impairment after transplantation by analysis of changes in gene expression.**

**2A:** Assess changes in gene expression in RNA isolated from total peripheral blood mononuclear cells from elderly versus younger kidney transplant recipients.

**2B:** Determine changes in gene expression in the T cell immune phenotype of the renal transplant recipient most strongly associated with age.

**Aim 3: Modeling the immunophenotype and gene expression networks to provide new insights into mechanisms underlying aging of the immune system.**

**3A:** Bioanalytic evaluation using a multivariate statistical approach to analyze immune phenotype and gene expression data to identify data attributes most strongly associated with patient age.

**3B:** Combination of most strongly associated immune phenotype and gene expression characteristics using principal component analysis to generate a model that captures important relationships in the data.

The successful execution of this project will advance the understanding of aging-related science in the field transplant medicine and infectious disease, and facilitate my transition into the field of aging research. This proposal addresses an important unmet need in the field of transplant medicine regarding outcomes in elderly transplant recipients and will be the first to formally address immune dysfunction and vulnerability to infectious complications from a geriatrics perspective. This work will therefore also provide new insights into the field of biologic investigations of mechanisms of aging by examining these mechanisms in the setting of immunosuppression, and from the perspective of infection predisposition and prevention.

**UCLA OAIC CDA Awardees (Current Cycle 2011 – Present)**

Name Current Status	OAIC CDA Award/ Year of Award	Subsequent Grants, Career Development Awards
<b>FORMER AWARDEES</b>		
<p><b>Jordan E. Lake, MD</b> Assistant Professor Medicine/Infectious Diseases</p>	<p>7/11 – 6/14</p>	<ol style="list-style-type: none"> <li>1. The Campbell Foundation. “Telmisartan and Flow-Mediated Dilatation in Older HIV-Infected Patients at Risk for Cardiovascular Disease.” Role on project: PI. February 2012 – February 2014. Total direct costs: \$76,500</li> <li>2. California HIV/AIDS Research Program. “Vitamin D and Immune Activation in Chronic HIV Infection” Role on Project: Co-I. September 2011 – March 2013. Total direct costs: \$249,731</li> <li>3. NIH K23. “Inflammation, Fibrosis and End-Organ Disease in HIV-Infected Adults.” Role on project: PI. June 2014 – May 2019. \$875,000</li> <li>4. NIH R21: “CBT and Exercise to Reduce Pain and Substance Abuse in Older Adults with HIV.” Role on project: PI. August 2014 – July 2016. \$275,000.</li> </ol>
<p><b>David Merrill, MD, PhD</b> Assistant Professor Psychiatry</p>	<p>7/11 – 6/13</p>	<ol style="list-style-type: none"> <li>1. UCLA CTSI Institutional KL2 Translational Science Award. “Relationship of physical activity to hippocampal structure and memory in MCI.” Role on project: PI. July 2013 – June 2016. Total direct costs: \$374,250.</li> </ol>

#### IV. PUBLICATIONS (2015 – 2016)

1. Bilousova T, Miller CA, Poon WW, Vinters HV, Corrada M, Kawas C, Hayden EY, Teplow DB, Glabe C, Albay R 3rd, **Cole GM**, Teng E, Gyllys KH. Synaptic Amyloid- $\beta$  Oligomers Precede p-Tau and Differentiate High Pathology Control Cases. *Am J Pathol*. 2016 Jan;186(1):185-98. doi: 10.1016/j.ajpath.2015.09.018. PubMed PMID: 26718979; PubMed Central PMCID: PMC4715217.
2. Bjurstrom MF, **Irwin MR**. Polysomnographic characteristics in nonmalignant chronic pain populations: A review of controlled studies. *Sleep Med Rev*. 2016 Apr;26:74-86. PubMed PMID: 26140866; PubMed Central PMCID: PMC4598249.
3. Bower JE, **Irwin MR**. Mind-body therapies and control of inflammatory biology: A descriptive review. *Brain Behav Immun*. 2016 Jan;51:1-11. PubMed PMID: 26116436; PubMed Central PMCID: PMC4679419.
4. Carroll JE, **Cole SW**, **Seeman TE**, **Breen EC**, Witarama T, Arevalo JM, Ma J, **Irwin MR**. Partial sleep deprivation activates the DNA damage response (DDR) and the senescence-associated secretory phenotype (SASP) in aged adult humans. *Brain Behav Immun*. 2016 Jan;51:223-9. PubMed PMID: 26336034; PubMed Central PMCID: PMC4679552.
5. Carroll JE, Esquivel S, Goldberg A, **Seeman TE**, Effros RB, Dock J, Olmstead R, **Breen EC**, **Irwin MR**. Insomnia and Telomere Length in Older Adults. *Sleep*. 2016 Mar 1;39(3):559-64. PubMed PMID: 26715231; PubMed Central PMCID: PMC4763369.
6. Cho HJ, Eisenberger NI, Olmstead R, **Breen EC**, **Irwin MR**. Preexisting mild sleep disturbance as a vulnerability factor for inflammation-induced depressed mood: a human experimental study. *Transl Psychiatry*. 2016 Mar 8;6:e750. PubMed PMID: 26954978.
7. Coccaro EF, Lee R, **Breen EC**, **Irwin MR**. Inflammatory markers and chronic exposure to fluoxetine, divalproex, and placebo in intermittent explosive disorder. *Psychiatry Res*. 2015 Oct 30;229(3):844-9. doi: 10.1016/j.psychres.2015.07.078. Epub 2015 Jul 29. PubMed PMID: 26277033; PubMed Central PMCID: PMC4837655.
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## **V. EXTERNAL ADVISORY BOARD MEMBERS**

### **James S. Goodwin, MD**

Professor, Division of Geriatric Medicine  
George and Cynthia Mitchell Distinguished Chair of Geriatric Medicine  
Director, Sealy Center on Aging  
The University of Texas, Medical Branch  
(2013 – Present)

### **James S. Jackson, PhD**

Director  
Institute for Social Research  
University of Michigan  
Ann Arbor, MI  
(2006 – Present)

### **Stephanie A. Studenski, MD, MPH**

Medical Officer;  
Chief, Longitudinal Studies Section  
Director, Baltimore Longitudinal Study of Aging  
National Institute on Aging  
(2013 – Present)

**University of California, Los Angeles  
David Geffen School of Medicine at UCLA  
Claude D. Pepper Older Americans Independence Center**

**2015-2016 RECOGNITION AND AWARDS**

*Lee A. Jennings, MD, MS*

- UCLA Research Conference on Aging, Poster Competition Winner, May 2016
- Junior Faculty Hamolsky Award Finalist, Society of General Internal Medicine, 2015
- Outstanding Research Mentor, UCLA Medical Student in Aging Research (MSTAR) Program, 2015
- Merck/American Geriatrics Society, 2016 New Investigator Award

*Jordan Lake, MD*

- Rising STAR Award, The University of Texas System, 2016

*David B. Reuben, MD*

- National Associate, National Academies of Sciences, Engineering, and Medicine - Health and Medicine Division

*Catherine A. Sarkisian, MD, MS*

- Best Poster Award in the category of Behavioral and Social Sciences, at the UCLA Research Conference on Aging, presented on May 10<sup>th</sup>, 2016.  
*Psychometric performance of the Korean 12-item Expectations Regarding Aging Survey (KERA-12). Araiza D, Choi S, Oh A, and Sarkisian C.*

**University of California, Los Angeles  
David Geffen School of Medicine at UCLA  
Claude D. Pepper Older Americans Independence Center**

**MINORITY RESEARCH AT UCLA PEPPER CENTER  
2015/2016**

**General Brief Description of Minority Activities:**

**RCMAR Initiative:**

The UCLA OAIC provides ongoing operational assistance to the new UCLA Resource Center for Minority Aging Research (RCMAR), one of seven centers funded for the 2002-2017 cycle of this NIH initiative. Carol M. Mangione, MD, MSPH, co-leader of the UCLA OAIC Recruitment and Retention Core, is also the principal investigator of the UCLA RCMAR program, called the Center for Health Improvement for Minority Elders (CHIME). Alison A. Moore, MD, MPH, leader of the UCLA OAIC Research Career Development Core, is the leader of the RCMAR CHIME Investigator Development Core. Catherine A. Sarkisian, MD, MS, leader of the UCLA OAIC Recruitment and Retention Core, is the leader of the RCMAR CHIME Community Liaison Core. The RCMAR Coordinating Center is based at UCLA.

CHIME is a collaborative research and mentoring program with faculty at UCLA and Charles R. Drew University that addresses health disparities for African American and Latino elders through training and mentorship of minority faculty. CHIME also provides the research infrastructure needed to improve the health of minority elders through participatory research within local communities. The center is active in the recruitment, retention, and promotion of minority junior faculty through mentorship and support of research efforts on the health of minority elders.

**OAIC Diversity Supplement - Adapting an Alcohol SBI (CARET) for Older Adults with HIV Infection:**

The UCLA OAIC received a two-year diversity supplement (07/01/14 – 06/30/16) to fund Homero del Pino, PhD.

Dr. del Pino is committed to becoming an independent investigator focused on alcohol misuse and HIV in aging populations. He completed a PhD in philosophy, with a focus on action theory. During and after graduate school, Dr. del Pino worked for six years at AIDS Project Los Angeles and trained state health departments and community-based organizations in evidence-based substance abuse and HIV-prevention interventions. His experience managing health-related programs led him to join Charles R. Drew University (CDU) as a full-time administrator in the NIMHD-funded U54 program, AXIS, that houses clinical and translational, community, and technology resources and provides consultation services for researchers.

Dr. del Pino now holds a dual faculty appointment at CDU and UCLA. The goal of Dr. del Pino's project is to adapt and pilot test the Comorbidity-Alcohol Risk Evaluation Tool (CARET), a screening tool for at-risk drinking in older adults and an accompanying brief intervention (BI) to meet the needs of an ethnically diverse group of HIV-positive adults aged 50 years

and older. The ultimate aim of this work is to reduce at-risk drinking and associated negative health outcomes for this population. The results of this pilot study will provide Dr. del Pino with the foundation to prepare an NIA OAIC Career Development Award and/or K01 proposal to further develop his career and research skills. Preparation for a career development award application will begin during Year 2 of the award period. The specific aims of this project are to partner with AIDS Project Los Angeles (APLA) and to:

- 1) Adapt the CARET and BI for HIV-positive African-Americans, Latinos and Whites aged 50 years and older.
- 2) Test the acceptability of the adapted CARET-HIV and BI with HIV-positive African-American, Latinos, and Whites aged 50 years and older (n=12, 4 in each racial/ethnic group) and healthcare providers (n≥5).
- 3) Pilot test the adapted CARET-HIV and BI among HIV-positive African-Americans, Latinos and Whites aged 50 years and older to assess the initial efficacy and feasibility of the adapted SBI during a home health visit (n=12, 4 in each racial/ethnic group).

Research projects dealing with minority health that received research support from UCLA OAIC Resource Cores 2015-2016:

- *Trial to increase walking sedentary older Latinos* (PI: Sarkisian, C)  
OAIC IBC provided analysis of metabolic (insulin) and inflammatory (CRP) markers. Findings indicate that in sedentary older Latinos, increasing physical activity was associated with improvements in these metabolic and inflammatory markers of health. The IBC assisted with manuscript preparation.
- *Family care of older Latinos with Diabetes* (PI: Mendez-Luck, C)  
OAIC Recruitment and Retention Core (RRC) facilitated recruitment and enrollment of dyads of seniors with diabetes and their adult caregivers in the Phase 3 pilot intervention.
- *African Americans with congestive heart failure* (PI: Briggs-Malonson, M)  
OAIC RRC facilitated connections with community partners to help recruit and enroll focus group participants. Collaborated with manuscript preparation.
- *Effectiveness of an intensive dietary sodium intervention in elderly Latinos* (PI: Macabasco, A)  
OAIC RRC is actively assisting with participant recruitment for Phase II of this study.
- *Exploring the Social Support of Gay Men in Sobriety* (PI: Del Pino, H)  
OAIC RRC facilitated recruitment by connecting with LA Gay and Lesbian Center.
- *Focus Groups of older, low-income Latino adults about retirement saving* (PI: Blanco).  
OAIC RRC facilitated recruitment through the Mexican American Opportunity Foundation.



- *Linguistic and Cultural Adaptation of the Geriatric Depression Scale and the PROMIS® Physical Function Item Bank to be used in Under-Served African American and Latino Elders* (PI: Paz).  
OAIC RRC facilitated recruitment through the Theresa Lindsay Multi Purpose Senior Center to recruit and the Mexican American Opportunity Foundation to recruit African Americans and Latino older adults.

### **Publications (2015-2016)**

1. **Del Pino HE**, Moore MR, Dacus JD, McCuller WJ, Fernandez L, **Moore AA**. Stigma and Family Relationships of Middle-Aged Gay Men in Recovery. *J Gay Lesbian Soc Serv*. 2016;28(1):1-19. Epub 2016 Jan 29. PubMed PMID: 27092028; PubMed Central PMCID: PMC4833399.
2. Kwon I, Bharmal N, Choi S, Araiza D, Moore MR, Trejo L, **Sarkisian CA**. Older Ethnic Minority Women's Perceptions of Stroke Prevention and Walking. *Women's Health Issues*. 2016 Jan- Feb;26(1):80-6. PubMed PMID: 26411494; PubMed Central PMCID: PMC4690776.
3. **Moore AA**, Karno MP, Ray L, Ramirez K, Barenstein V, Portillo MJ, Rizo P, Borok J, Liao DH, Barron J, **Del Pino HE**, Valenzuela A, Barry KL. Development and Preliminary Testing of a Promotora - Delivered, Spanish Language, Counseling Intervention for Heavy Drinking among Male, Latino Day Laborers. *J Subst Abuse Treat*. 2016 Mar;62:96-101. PubMed PMID: 26738641; PubMed Central PMCID: PMC4744478.
4. Moreno G, Mangione CM, Meza CE, Kwon I, **Seeman T**, Trejo L, **Moore M**, **Sarkisian CA**. Perceptions from Latino and African American older adults about biological markers in research. *Ethn Dis*. 2015 Summer;25(3):355-62. PubMed PMID: 26347148; PubMed Central PMCID: PMC4559266.