

The University of California, San Francisco
Claude D. Pepper Older Americans Independence Center
Predictors, Characteristics, and Outcomes of Late-life Disability: A Focus on Vulnerable Populations

2016 OAIC Annual Directory

Section I. Description of Center

The UCSF Claude D. Pepper Older Americans Independence Center

Established in 2013, the UCSF Claude D. Pepper Older Americans Independence Center focuses on addressing predictors, characteristics, and outcomes of late-life disability in vulnerable populations at increased risk for disability or death. Late-life disability, defined as needing help with daily activities, is common, burdensome, and costly to patients, families, and society. Late-life disability is influenced by medical vulnerabilities (including comorbid illnesses, aspects of medical care, medicines, procedures, neuropsychiatric conditions, and behaviors), social vulnerabilities (social supports, financial resources, communication and literacy, and ethnicity), and their interaction. The overriding goal of the UCSF OAIC is to improve the health care and quality of life of vulnerable older adults with or at risk for disability through the following aims:

- 1) Catalyze research on disability in vulnerable older persons at UCSF by serving as a hub that brings together scholars and leverages resources;
- 2) Provide tangible, high-value support to funded projects at UCSF that stimulate new research on disability, and lead to new research opportunities for senior and junior investigators;
- 3) Support pilot studies that accelerate science and lead to research funding in late life disability;
- 4) Identify the future leaders of geriatrics research and support them with career development funding and exceptional mentoring; and
- 5) Develop a leadership and administrative structure that spurs interdisciplinary collaboration, making the OAIC greater than the sum of its parts.

Our Center supports researchers who share our passion for improving the well-being of older persons. We view our resources as venture capital that will catalyze the careers and research paths of investigators who will do cutting edge research that advances the care, health, and wellbeing of older persons, both within the UCSF community and nationally.

Principal Investigator

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Section II. Research, Resources and Activities

A. Cores:

The Leadership Administrative Core (LAC) plays the central role in coordinating the five UCSF OAIC cores, in maintaining communication across programs, and identifying new opportunities, both within and outside the OAIC. The LAC monitors the success of each core based on tangible metrics of productivity: Research leading to publications in the highest impact journals and new NIH grant funding. The LAC monitors, stimulates, evaluates, remediates, and reports progress toward the goals of the OAIC. The LAC also maintains the substantial collaborations with other UCSF research centers, including the UCSF CTSI and RCMAR, and seeks to establish new collaborations which will leverage OAIC resources and develop new and established investigators in aging research. The overall goal of the LAC is to provide the leadership and administration to support the activities of the entire UCSF OAIC.

Core Leader:

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The Research Education Component (REC) identifies, supports, and nurtures talented junior investigators who will become national leaders in aging research through the REC Scholars Program and Advanced Scholars Program. The REC Scholars Program targets early career faculty and seeks to accelerate their path towards NIA K awards. The Advanced Scholars Program targets current K award recipients and accelerates the path towards their first R01. Both programs provide extensive mentoring and opportunities to participate in an innovative series of seminars designed to develop skills essential to success in aging research, facilitate interdisciplinary communication, build knowledge and relationships that will stimulate translation between basic and clinical research, and accelerate their productivity. The REC leadership also works with leaders of the Resource Cores to provide scholars access to additional support. These mentorship and curricular programs help junior investigators progress along the pathways that lead to high impact publications and grant funding that develops the scholar's national reputation as a leader in their area. Mentoring services, seminar series, resource core services, and programmatic support are also available to Associate Scholars whose goals are to develop careers in aging research. A particular focus of the Associate Scholars Program is junior faculty who have trained outside of geriatric medicine, but seek to incorporate Geriatric principles into their developing research program. The Research Education Component also sponsors a diversity supplement program to increase the number of faculty members from underrepresented and diverse backgrounds conducting aging research at UCSF.

Current REC Scholars:

Elizabeth Dzeng, MD, MPH, Assistant Professor, Division of General Internal Medicine
Dr. Dzeng was chosen because of her innovative research focused on communication about end of life treatments in older adults. As a REC scholar she will conduct mixed methods research on moral distress among physicians regarding futile treatments in older adults at the end of life. She aims to explore the influence of hospital culture on ethical thinking and end of life practices in older adults.

Jane Jih, MD, MPH, Assistant Professor, Division of General Internal Medicine
Dr. Jih is a General Internist in the UCSF Division of General Internal Medicine and a GEMSTAR R03 awardee. Her work examines the contribution of food insecurity to multiple chronic conditions in diverse older adults. As a REC scholar, she will use the Health and Retirement Study (HRS) to determine: 1) the prevalence of food insecurity among older adults with multi-morbidity; 2) sociodemographic and health predictors of food insecurity; and 3) associations of food insecurity with functional limitations, health care costs, and family structure.

Current REC Advanced Scholars:

Elena Portacolone, PhD, MBA, MPH, Assistant Professor of Nursing
Dr. Portacolone is a Social Scientist in the School of Nursing's Institute for Health & Aging who received an NIA K01 in September 2015. As a REC Advanced Scholar she will conduct a mixed-methods study to examine the lived experience of older adults from ethnic/racial minorities living alone with cognitive impairment. Dr. Portacolone is collecting data on social isolation of older residents in high-crime neighborhoods focusing on: 1) factors associated with social isolation; 2) the optimal methodology for recruiting truly isolated older adults; and 3) effects on participants of receiving a diagnosis of cognitive impairment.

Raquel Gardner, MD, Assistant Professor, Department of Neurology

Dr. Gardner is a Neurologist and Beeson Scholar who has developed an innovative focus studying the predictors and outcomes after traumatic brain injury (TBI) in older adults. As a REC Advanced Scholar, she will use the multi-site Transforming Research and Clinical Knowledge in TBI study and the Brain Aging in Veterans study to define cognitive, motor, mood/behavioral, and functional trajectories and predictors of trajectories in 1) older adults with acute TBI and 2) older adults with remote TBI.

Anne Suskind, MD, MS, Assistant Professor, Department of Urology

Dr. Suskind is a Urologist, a UCSF K12 awardee and a GEMSSTAR R03 awardee. Her innovative research focuses on outcomes in older adults undergoing urologic procedures. As a REC Advanced Scholar, she will use the Minimum Data Set (MDS) linked to Medicare data to examine outcomes following common urologic procedures in nursing home residents in the U.S. She aims to study 1) immediate (30-day) outcomes following urologic procedures (e.g., cystoscopy, transurethral resection and incision of the prostate, prostate biopsy, etc.) among nursing home residents and determine factors associated with outcomes; and 2) long-term (1-year) functional and cognitive outcomes following common urologic procedures among nursing home residents and determine factors associated with outcomes.

The Research Design and Analysis Core (RDAC) provides OAIC investigators access to statistical services at all stages of the research lifecycle. Through the establishment of a central hub of statistical expertise, the RDAC ensures smooth delivery of statistical knowledge and rigor across the spectrum of scientific research at the OAIC. This improves the quality of OAIC research studies, helps nurture trainees, facilitates interdisciplinary research groups, and ultimately enhances research on prediction, characterization, and outcomes of late-life disability, especially in vulnerable populations. The RDAC promotes wider use of state of the art statistical practice, lowers barriers of access to basic statistical services to all research groups including trainees, provides access to specialized statistical resources (such as state of the art prognostic model development, complex longitudinal and latent class analysis, and causal inference methods), and develops statistical procedures targeted to solving problems in aging research, and more specifically to challenges that commonly arise in research on disability and function.

In addition to supporting OAIC investigators with these services, the RDAC has identified a substantial number of UCSF investigators holding extramurally funded grants that support a broad range of interdisciplinary translational research on age-related impairment and disability. Three of these have been selected as providing special opportunities to pursue translational research in the OAIC theme area, and will each be allocated substantial RDAC effort in Year 1 as OAIC affiliated External Projects. For the first External Project, the RDAC provided assistance with developing risk-stratification models to predict thromboembolism recurrence and major hemorrhage and helping the investigators account for missing data, competing outcome events, and complex longitudinal predictor measures in Dr. Margaret Fang's R01. For the second External Project, the RDAC provided vital assistance for statistical analysis of disability trajectories, accounting for the complex survey-weighted design in the data set, and proper handling of the competing risk of death in the disability analyses in a study by Ken Covinsky, MD on hip fracture in older adults. For the third External Project, the RDAC provided guidance on a range of causal analysis methods including propensity score adjustment, instrumental variables modeling, and local instrumental variables to address essential heterogeneity in a study by Louise Walter, MD on prostate-specific antigen practices and outcomes in the elderly.

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The Data, Measures, and Accrual Core (DMAC) serves to help investigators leverage existing data to conduct high-value research on late-life disability in vulnerable older adults by 1) aiding the design of research studies using existing data; 2) facilitating the inclusion of measures of function and disability into primary data collection studies and the recruitment of vulnerable older patients for these studies; and 3) developing new tools for capturing functional status data from large datasets. To accomplish these activities, the DMAC provides several types of services.

First, the DMAC provides consultation and data management support for research using existing data sources, with a particular focus on three high-value national datasets: the Health and Retirement Study, national VA data, and the Minimum Data Set, a national registry of data from nursing homes. These services include (a) consultations with experts to help design studies of late-life disability using existing data sources; (b) an online resource library of information about use of the 3 supported datasets for research on late-life disability; and (c) data management support to access and prepare data files for research.

Second, the DMAC consults with investigators to add measures of function and disability to primary data collection studies, and to provide guidance on recruitment and retention of vulnerable older adults in research.

Third, the DMAC supports a development project that investigates the usability and validity of national VA data for measuring functional status in older veterans.

In addition to supporting OAIC investigators with these services, the DMAC supports three External Projects. The first external project comprises a study done by Nursing PhD student Lauren Hunt evaluating pain in older adults with dementia, using data from the National Health and Aging Trends Study, with mentoring and support provided by Drs. Covinsky and Yaffe. Findings from this study were published in the Journal of the American Geriatrics Society. The second external project is a continuation of a series of epidemiologic studies by Dr. Amy Byers on late-life suicidal behavior in older veterans, funded by an IIR from the VA CSR&D service and by an R01 from NIMHD. Dr. Covinsky provided Dr. Byers support with design and interpretation of her studies to incorporate geriatric and functional considerations, while Dr. Boscardin from the RDAC core provided assistance in the use of the National SPAN, Veteran Suicide Archive, NPCD, and CMS data to conduct the first comprehensive longitudinal examination of suicidality in older Veterans. The third external project is an ongoing R01 by Margot Kushel, MD of the UCSF Division of General Internal Medicine evaluating geriatric syndromes in a cohort of older homeless adults; Dr. Walter has provided Dr. Kushel with extensive methodologic advice and support on measurement and interpretation of geriatric syndromes and conditions. Finally, we have also provided external project support to the San Francisco VA Health Care System's QUERI program, which has several projects on which we have provided close advice and support.

Core Leaders:

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The Pilot and Exploratory Studies Core (PESC) facilitates the development and progress of innovative research relating to the Pepper Center focus on the predictors, characteristics, and outcomes of late-life disability, especially in vulnerable older populations. We are especially interested in the interaction of serious clinical conditions, disability, and social disadvantage. The goals of the PESC include: 1) Solicit and select innovative proposals from highly qualified applicants; 2) Provide investigators of PESC studies with the support and infrastructure of the OAIC Cores; 3) Integrate PESC studies and investigators with resources from the UCSF Clinical and Translational Science Institute (CTSI) and other relevant resources at UCSF; 4) Monitor the progress of PESC studies; and 5) Provide mentorship and resources to transform PESC funded studies into successful independently-funded projects. The PESC focuses on identifying projects from outstanding investigators who are conducting aging research that is likely to lead to external funding and is aligned with the OAIC theme.

Current Pilot Studies:

Rebecca Brown, MD: Factors Associated with Early Versus Late Life Homelessness in a Cohort of Older Homeless Adults

Meredith Greene, MD: Addressing Medical Complexity for Older Adults Living with HIV infection: Development of an Integrated HIV Geriatric and Palliative Care Program

Julene Johnson, PhD: a) Music as Symptom Management: a Pilot Study; b) The Effects of the Arts on Health, Function, and Cognitive Outcomes – Secondary Data Analysis

Margot Kushel, MD: Symptoms and Their Management in Older Homeless Adults – a Qualitative Study

Eleni Linos, MD, DrPH: Involving Older Adults in Decision Making for Skin Cancer

Carmen Peralta, MD: Associations of Blood Pressure with Adverse Outcomes in Persons 65 Years who are Considered to be in the Complex Aging Process

Christine Valdez, PhD: Spanish Translation and Adaptation of a Trauma Cognitions Measure for Posttraumatic Stress Disorder: Validation in Latinos across the Adult Lifespan.

Maya Vijayaraghavan, MD, MAS: Development of a Tobacco Control Intervention for Older African American Homeless Adults

Wolf Mehling, MD: Paired Integrative Home Exercise for Seniors With Dementia And Their Caregivers: A Pilot Study

Elena Portacolone, PhD, MBA, MPH: The Social Isolation of Older Americans Living in High-Crime Neighborhoods: Root Causes and Possible Solutions

Caroline Stephens, RN, PhD, GNP: Improving Palliative Care Access Through Technology (ImPacTT): A Pilot Study

Previous Pilot Studies:

Andy Auerbach, MD: Characterizing Post-Acute Care Costs for Older Patients Discharged from an Academic Medical Center

Emily Finlayson, MD, MS: Functional Outcomes after Breast Cancer Surgery in Older Nursing Home Residents

Salomeh Keyhani, MD: Improving 30-day Readmission Risk Prediction for Hospitalized Older Adults Using Measures of Social Risk and Functional Status from Electronic Medical Records

Rebecca Sudore, MD: Piloting a Guide to Prepare Older Adults to Make Informed Decisions for Disability and Serious Illness

Joaquin Anguera, PhD: Self-Guided Internet and Mobile Health Technologies for the Delivery of Behavioral Interventions in Hispanic/Latino Populations

Core Leader:

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B. Research:

Pepper Development Projects:

Development Project 1: Statistical Methods and Software for Validating the Prognostic Model Building Process

A common goal in aging research is to develop accurate prognostic models for functional outcomes. The OAIC faculty have been leaders in the development of methods for prognostic modeling and their translational use in clinical medicine in settings such as cancer screening, diabetes, and in broader aging populations. Validation of the prognostic model is critically important to guarantee that its predictive accuracy will not degrade when applied in external data sources. By far the most common approach in the literature is split-sample validation; the model is developed in just one portion of the data and then validated in the remaining portion. Any discrepancy between the predictive accuracy in the development and validation sets is regarded as evidence of overfitting or optimism. The statistical literature is in strong agreement that split-sample assessment of model optimism is extremely inefficient for two reasons: (i) there is a substantial loss of estimation precision from developing the model in a portion of the data, and (ii) unless sample sizes are extremely large, little can be learned about the model optimism from a single split-sample.

Alternative approaches to assessing model optimism that make full use of the data include cross-validation and bootstrapping. These methods have much in common in that they (i) replicate the development and validation cycle many times and (ii) use a full or nearly full version of the dataset for each cycle. One difficulty in routinely implementing either cross-validation or bootstrapping has been a lack of user-friendly software to implement the computationally intensive calculations. Furthermore, the algorithms in the literature focus on optimism due to estimating the model coefficients in the development sample (i.e. maximum likelihood estimation means that the model coefficients are optimally chosen for the development sample) but for the most part ignore optimism due to overfitting in the model building process (e.g. selection of predictors; categorization of continuous predictors; choices related to functional form for continuous predictors).

This development project aims to develop cross-validation and bootstrapping algorithms to assess model optimism that consider all of the steps that investigators use in the prognostic model-building process including: (i) explicitly acknowledging that predictor construction is not usually pre-specified, e.g. continuous predictors are often categorized using their observed distributions in the data; (ii) reflecting that variable selection is often a mix of pre-specification, inclusion of bivariately significant predictors, and stepwise or best subsets selection. The algorithms were developed in both SAS and Stata to allow researchers to routinely obtain an honest and efficient assessment of this full process model optimism.

Our software is novel for several reasons. First, analysts using SAS or Stata were not previously able to routinely assess optimism in the prognostic model building process. With the exception of Harrell's *rms* library, software implementations of even simplistic bootstrapping or cross-validation algorithms for assessing model optimism are not widely or routinely used by analysts. Second, we partitioned the optimism into that due to coefficient estimation and that due to the details of the model building process.

Development Project 2: Measurement and Validation of Functional Measures in National VA Databases

Large clinical and administrative databases have been the source of extensive research. However, because data on functional status and disability are often not systematically collected during clinical care, studies of late-life disability have been unable to take advantage of these large-scale data sources.

Recent developments in VA provide a potential breakthrough in this area. Over the past 3 years, VA's central office has been encouraging medical centers to collect annual data on functional status for all patients age 75 years and older, including information on Katz Activities of Daily Living (ADLs) and Lawton Instrumental Activities of Daily Living (IADLs). It is estimated that over half of VA facilities are routinely collecting functional status data, with data collection typically done by clinic nurses during patient triage and entered into checkbox formatted templates in the electronic medical record. In most facilities, data from these checkboxes are captured as a "health factor," a discrete and searchable data field. These data can potentially be merged with information from other VA databases to answer novel questions about the epidemiology, predictors, and outcomes of disability in the millions of older veterans who receive care through VA.

Despite this tremendous potential, we know of no attempts to use these data for research or to develop strategies for reliably extracting these data from VA information systems and/or validate their accuracy. Validating the accuracy of these data is of critical importance, as it is unclear how accurately functional status data are being assessed and recorded in routine clinical care.

Thus, our second development project is a validation study that compares information recorded on ADL and IADL status during routine clinical care with the same data evaluated in a structured research setting.

Specific Aim 1: To identify how functional status data are encoded across VA health care systems, and to develop automated tools to extract these data from national VA data sources.

Specific Aim 2: To assess the validity of functional status data recorded in 3 VA health systems compared with a gold standard of structured self-report.

For Aim 1, we have started to work with VA's Informatics and Computing Infrastructure (VINCI) to identify and extract health factor data on functional status from VA's Corporate Data Warehouse (CDW). Because templates for coding and storing health factor information are not fully consistent across local VA health systems, we will use specific keywords (such as "ADL" and "bathing") to identify and extract relevant health factor data fields in an iterative process. Extraction of such data is simpler and more reliable than natural language processing, since functional status data are entered into a set template rather than as free text notations.

For Aim 2, we will validate chart-recorded functional status against structured self-report data collected from patients at 3 VA sites. Twice per week, we will extract Corporate Data Warehouse data from each site to identify patients age 75 and older who had new functional status data entered within the past week (source databases are updated nightly). We will stratify these patients into functional strata (independent in all ADLs vs dependent in 1 or more ADLs) and contact a random sample of patients within each stratum by phone within 2 weeks of their clinic visit. After obtaining verbal consent (see end of this section for more information on human subjects protections), we will use the 6-item Short Blessed Test to assess cognitive status. For subjects with no to minimal cognitive impairment (test score ≤ 8), we will use standardized research questionnaires to ask patients about their need for assistance with the 6 Katz ADLs and

7 Lawton IADLs, and whether any of these have changed since their last clinic visit. (Previous studies have found that the Katz and other ADL scales are reliable when administered by telephone.) Because self-report is the criterion standard for these functional status measures, we will compare these standardized self-reports against functional status measures recorded for the same patients in VA health factor data. Our primary analysis will evaluate the sensitivity and specificity of ADL assessment in VA, dichotomized into any versus no ADL dependencies, and assess Spearman correlation between the chart-based and research-based ADL scores (with scores from 0-6). Given an estimated sensitivity and specificity of 0.85-0.90 and Spearman correlation coefficient of 0.80, a sample size of 300 will produce 95% confidence intervals of approximately +/- 0.05 around our point estimates.

We will share our data extraction algorithms with VA's VINCI research program and Office of Geriatrics and Extended Care. If our study confirms the validity of VA functional status data, next steps would include investigating the predictive validity of these measures on health services utilization and outcomes. Similarly, we will work with UCSF Medical Center and other groups to promote collection of functional status data in their clinical information systems. Because functional status data predict hospital admission (or re-admission), they are likely to be of interest to health system administrators.

Pepper Supported External Projects: Year 3

In Year 3, we designated 3 External Projects that merited particularly close support and which reflect the key aims of our resource cores:

The first external project comprises a study done by Nursing PhD student Lauren Hunt evaluating pain in older adults with dementia, using data from the National Health and Aging Trends Study, with mentoring and support provided by Drs. Covinsky and Yaffe. Findings from this study were published in the Journal of the American Geriatrics Society.

The second external project is a continuation of a series of epidemiologic studies by Dr. Amy Byers on late-life suicidal behavior in older veterans, funded by an IIR from the VA CSR&D service and by an R01 from NIMHD. Dr. Covinsky provided Dr. Byers support with design and interpretation of her studies to incorporate geriatric and functional considerations, while Dr. Boscardin from the RDAC core provided assistance in the use of the National SPAN, Veteran Suicide Archive, NPCD, and CMS data to conduct the first comprehensive longitudinal examination of suicidality in older Veterans.

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C. Pilots:

Year 3 Pilots: 2015-2016

PES-1: Factors Associated with Early Versus Late Life Homelessness in a Cohort of Older Homeless Adults (Project Leader: Rebecca Brown, MD, Assistant Professor, UCSF Division of Geriatrics and San Francisco VA Medical Center). The aim of this study is to describe life course events in a cohort of older homeless adults, and to identify characteristics associated with experiencing a first episode of homelessness in early versus later adulthood. This pilot has been using data from a large cohort study of homeless adults aged 50 and older, the HOPE HOME Study (Health Outcomes in People Experiencing Homelessness in Older Middle age), which includes extensive data about key life course events that may contribute to homelessness.

PES-2: Addressing Medical Complexity for Older Adults Living with HIV infection: Development of an Integrated HIV Geriatric and Palliative Care Program (Project Leader: Meredith Greene, MD, Assistant Professor, UCSF Division of Geriatrics and San Francisco VA Medical Center) Within the San Francisco General Hospital's Positive Health Program "Ward 86," this study seeks to develop an integrated geriatric and palliative care clinic and study its outcomes to address this knowledge gap. It is examining the impact of geriatric and palliative care services on patient reported outcomes such as satisfaction with care and quality of life, as well as the impacts on medication prescribing and service utilization within this large urban clinic.

PES-3: 3a) Music as Symptom Management: a Pilot Study. This study examines the effect of an iPad application that involves music-associated autobiographical memory as a possible intervention for symptom management in severely ill patients receiving palliative care services.
3b) The Effects of the Arts on Health, Function, and Cognitive Outcomes – Secondary Data Analysis. This study utilizes the new Arts and Culture module from the Health and Retirement Study to examine the cross-sectional associations between engagement in various arts activities and health, function, and cognitive outcomes in a sample of approximately 2,000 older adults, including those from diverse racial/ethnic backgrounds.
(Project Leader for both pilots: Julene Johnson, PhD, Cognitive neuroscientist and Professor at the UCSF Institute for Health & Aging)

PES-4: Symptoms and Their Management in Older Homeless Adults – a Qualitative Study. (Project Leader: Margot Kushel, MD, Professor of Medicine in the Division of General Internal Medicine at the Zuckerberg San Francisco General Hospital and Trauma Center). This study is using in-depth interviews to examine how older homeless adults are affected by their symptoms (shortness of breath, constipation/diarrhea, pain, insomnia, fatigue, guilt, regret), and their management strategies (including but not limited to their use of the health care system (primary care, emergency care), alternative and complementary strategies, substance use, environmental changes, etc). It also examines their ideas as to what would be most useful in mitigating symptomatology. Dr. Kushel has had the opportunity to engage learners at various stages in her research and is partnering with medical students to do this research. By involving trainees, she hope to engage trainees in aging research.

PES-5: Involving Older Adults in Decision Making for Skin Cancer. (Project Leader: Eleni Linos, MD, DrPH, Assistant Professor, Department of Dermatology). More patients are diagnosed with basal and squamous cell carcinoma (collectively termed non-melanoma skin cancer or NMSC) in the US than all other cancers combined: more than 3.6 million NMSCs vs. 1.7 million other cancers each year. Over a quarter of patients report problems related to treatment of NMSC and over 100,000 NMSCs are treated annually in persons who ultimately die within one year. The central hypothesis of this research is that there is significant procedure overuse for NMSC in patients with limited life expectancy, and that patients want to know the risks and benefits associated with management options including active surveillance. The rationale underlying this research is that these are ubiquitous, slow-growing tumors, and that patients should be informed of the risks and benefits of all management options, in order to make choices consistent with their clinical characteristics, values and preferences. This study aims to understand expert and practicing physicians' perspectives on skin cancer care at the end of life, which will lay the groundwork for future funding to develop and test the effect of decision tools on treatment utilization and patient-reported outcomes in patients with limited life expectancy.

PESC-6: Associations of Blood Pressure with Adverse Outcomes in Persons 65 Years who are Considered to be in the Complex Aging Process. (Project Leader: Carmen Peralta, MD, Associate Professor, Division of Nephrology, UCSF Department of Medicine). The long-term goal of this study is to reliably identify elderly persons in whom blood pressure treatment is beneficial and those in whom treatment is ineffective, by defining subpopulations of similar health status. Specifically, the study aims to identify factors from four domains (functional, cognitive/mental, self-rated health, and physiologic) that can identify elderly persons in whom high blood pressure is strongly associated with higher risk for death and cardiovascular events, using data from three NIH-funded cohorts: Cardiovascular Health Study (CHS), Health Aging and Body Composition (Health ABC) and Sacramento Area Latino Study on Aging (SALSA).

Partnership with Tideswell™ at UCSF

PESC-7: Paired Integrative Home Exercise for Seniors with Dementia and their Caregivers: A Pilot Study (Project Leader: Wolf Mehling, MD, Associate Clinical Professor, UCSF Department of Family and Community Medicine). Few resources are available to help people living in the community with dementia maintain independence and quality of life. This study has adapted and pilot-tested an integrative exercise program called PLIÉ, originally designed for the adult day care setting, so that it can be performed at home in pairs by affected individuals and caregivers (Paired PLIÉ). Paired PLIÉ is a unique integrative exercise program that could be widely disseminated at relatively low cost and could substantially improve function and quality of life in people living with dementia and their care partners.

PESC-8: Social Isolation of Older Americans Living in High-Crime Neighborhoods: Root Causes and Possible Solutions. (Project Leader: Elena Portacolone, PhD, MBA, MPH, Assistant Adjunct Professor, UCSF Institute for Health & Aging). Very little is known about the experience of older residents of high-crime neighborhoods. It is important to expand our knowledge on this population because older residents of high-crime neighborhoods are likely to be socially isolated and at risk for poor health outcomes. This study aims to build knowledge of culturally-sensitive clinical interventions to (1) improve understanding of isolated elderly; and (2) identify potential strategies that will increase the quality of life of this vulnerable population.

PESC-9: Improving Palliative Care Access in Nursing Homes Through Technology (ImPACTT). (Project Leader: Caroline Stephens, PhD, MSN, APRN, Assistant Professor, Community Health Sciences, UCSF School of Nursing). Nursing homes are increasingly becoming the place of care and site of death for frail older adults living and dying from multiple chronic illnesses. This vulnerable population has had little access to formal palliative care expertise outside of hospice services. Palliative care services have not kept pace with the growing demand, so alternative workforce strategies are needed to expand the reach of palliative care to nursing homes. Telehealth, or remote monitoring of patients through information and communication technologies, may allow palliative care specialists to efficiently reach individuals with advanced illness and unmet symptom management needs.

Supplemental Funding with the Center for Aging in Diverse Communities

PESC-10: Spanish Translation and Adaptation of a Trauma Cognitions Measure for Posttraumatic Stress Disorder: Validation in Latinos across the Adult Lifespan. (Project Leader: Christine Valdez, UCSF Postdoctoral Scholar). The PI has co-developed the Posttraumatic Information Processing Scales (PIPS), a measure of trauma cognitions that assesses positive and negative trauma cognitions linked to trauma-focused therapy goals. The PIPS is undergoing preliminary validation in English-speaking student and online samples. This study will translate the PIPS into Spanish and validate it with a Latino population that is at high risk for trauma and negative reactions. The aims of this study are to: 1) translate and adapt the PIPS for Spanish-speaking therapy clients; 2) conduct a psychometric evaluation of the PIPS with Latino older adults seeking specialized clinical services for trauma-focused therapy; and 3) pilot test the use of PIPS with Latino clients in trauma-focused therapy.

PESC-11: Development of a Tobacco Control Intervention for Older African American Homeless Adults. (Project Leader: Maya Vijayaraghavan, MD, MAS, Assistant Professor, UCSF San Francisco General Division of General Internal Medicine). The aim of this study is to develop an intervention to increase smoking cessation among older, African American homeless smokers. We will recruit a sub-group of 30 African American current smokers from an established cohort of 350 homeless adults, of whom 80% are African American (The Aging Homeless Cohort Study, PI, Margot Kushel, MD), to conduct in-depth, semi-structured interviews to identify new tobacco control strategies for this population.

Section III. Career Development: funding subsequent to Pepper pilot funding

Research Career Development Core (RCDC) / Research Education Component (REC) Scholars

Sei Lee, MD, MAS

VA HSR&D Locally Initiated Project grant, Understanding and Improving Diabetes Care in VA Community Living Centers

R01 AG047897, NIA/NIH, Developing prognostic models for life expectancy and geriatric outcomes

Alex Smith, MD, MPH

K23 AG040772, Late Life Disability: Epidemiology, Symptoms, Quality of Life

R01 AG047897, NIA/NIH, Developing prognostic models for life expectancy and geriatric outcomes

National Palliative Care Research Center, Prognosis Communication with Disabled Elders

Brie Williams, MD, MS

Hartford Geriatrics Health Outcomes Research Program Mini-Grant - 2013

National Palliative Care Research Center Pilot Award: The Relationship between Distressing Symptoms, Functional Decline and Emergency Services Use in Older Jail Inmates - 2013

UCSF University Community Partnerships Grant funded- 2013

Diversity Supplement from the National Institute on Aging- 2014

Pilot grant to the Robert Wood Johnson Foundation- 2014

University of California Office of the President Research Catalyst Award: The UC Consortium on Criminal Justice Healthcare – 2015

Prison Law Office, European-American Criminal Justice Leadership Program – 2015

Jacob and Valeria Langeloth Foundation, The health risks and costs of solitary confinement:

Advancing medical evidence for policy reform – 2016

National Palliative Care Research Center Pilot Grant, Bringing Advanced Care Planning to Prisons – 2016

Ryan Greysen, MD

KL2 National Center for Advancing Translational Sciences

K23 AG045338 Functional, Cognitive, and Social Vulnerabilities and Hospital Readmission

Jennifer Lai, MD

K23 AG048337 Frailty and Functional Status in Older Liver Transplant Patients

Raquel Gardner, MD

R21 HD089081, NICHD, Defining Clinical Trajectories after Traumatic Brain Injury

K23 NS095755, NINDS, Traumatic Brain Injury And The Aging Brain: Predictors Of Clinical Trajectories

Jane Jih, MD, MPH

R03 AG050880 (GEMSSTAR), NIH/National Cancer Institute, Identifying and Assessing Food Insecurity In Older Diverse Primary Care Patients

UCSF Pilot in Integrative Medicine (Co-I), Osher Center. Pilot RCT of integrative nutritional counseling to improve diet self-management among Chinese Americans with type 2 diabetes

Anne Suskind, MD, MS

SUFU Research Foundation, The Study of Overactive Bladder and Urgency Urinary Incontinence

R03 AG050872 (GEMSSTAR), NIH-NIA, Immediate and Long-Term Outcomes of Common Urologic Procedures in Nursing Home Residents

Elena Portacolone, PhD, MBA, MPH

K01AG04910201, NIA, Living Alone in Older Age with Cognitive Impairment
Alzheimer's Association, Living Alone in Older Age with Alzheimer's disease

Pilot and Exploratory Studies Awardees

Rebecca Brown, MD

KL2, CTSI, Epidemiology and Outcomes of Premature Geriatrics Syndromes

K23 AG045290, Epidemiology and Outcomes of Premature Geriatric Syndromes

QUE 15-283, Department of Veterans Affairs Quality Enhancement Research Initiative (QUERI), Implementation of Standardized Measurement of Functional Status for Older Veterans.

Meredith Greene, MD

Tideswell at UCSF, Addressing Medical Complexity for Older Adults Living with HIV infection: Development of an integrated HIV Geriatric and Palliative Care Program

Julene Johnson, PhD

AROHA-2015-13180, Aroha Philanthropies, Roadmap to Accelerating Arts-Based Research for Older Adults

Margot Kushel, MD

R01 AG041860, Aging among the homeless: geriatric conditions, health and healthcare outcomes

R01 AG050630, Family-assisted Housing for Older Homeless Adults

K24 AG046372, Mentoring Researchers in Aging in Vulnerable Populations

Eleni Linos, MD

UCSF Cancer Center Impact grant, Melanoma Prevention Using Social Media

Rebecca Sudore, MD

Tideswell at UCSF Grant Award, Developing a toolkit to empower IHSS workers to engage disenfranchised older adults in advance care planning – 2015

National Palliative Care Research Center Pilot Grant, Developing a Toolkit to Empower Medicaid-Paid Caregivers to Manage Common Palliative Care Symptoms – 2016

Gordon and Betty Moore Foundation Award, English and Spanish advance directives customized for all 50 United States – 2016

OptumCare License Agreement, Evaluating the effectiveness of OptumCare collaboration using PREPARE's new reporting functions to measure uptake – 2016

Section IV. 2015-2016 Publications:

1. Tang V, Boscardin WJ, Stijacic-Cenzer I, Lee SJ. Time to benefit for colorectal cancer screening: survival meta-analysis of flexible sigmoidoscopy trials. *BMJ*. 2015 Apr 16;350:h1662. PubMed PMID: 25881903; PubMed Central PMCID: PMC4399600.
2. Gardner RC, Burke JF, Nettiksimmons J, Goldman S, Tanner CM, Yaffe K. Traumatic brain injury in later life increases risk for Parkinson disease. *Ann Neurol*. 2015 Jun;77(6):987-95. PubMed PMID: 25726936; PubMed Central PMCID: PMC4447556.
3. Greene M, Covinsky KE, Valcour V, Miao Y, Madamba J, Lampiris H, Cenzer IS, Martin J, Deeks SG. Geriatric Syndromes in Older HIV-Infected Adults. *J Acquir Immune Defic Syndr*. 2015 Jun 1;69(2):161-7. PubMed PMID: 26009828; PubMed Central PMCID: PMC4445476.
4. Ornstein KA, Leff B, Covinsky KE, Ritchie CS, Federman AD, Roberts L, Kelley AS, Siu AL, Szanton SL. Epidemiology of the Homebound Population in the United States. *JAMA Intern Med*. 2015 Jul;175(7):1180-6. PubMed PMID: 26010119; PubMed Central PMCID: PMC4749137.
5. Gardner RC, Possin KL, Hess CP, Huang EJ, Grinberg LT, Nolan AL, Cohn-Sheehy BI, Ghosh PM, Lanata S, Merrilees J, Kramer JH, Berger MS, Miller BL, Yaffe K, Rabinovici GD. Evaluating and treating neurobehavioral symptoms in professional American football players: Lessons from a case series. *Neurol Clin Pract*. 2015 Aug;5(4):285-295. PubMed PMID: 26336629; PubMed Central PMCID: PMC4549717.
6. Hunt LJ, Covinsky KE, Yaffe K, Stephens CE, Miao Y, Boscardin WJ, Smith AK. Pain in Community-Dwelling Older Adults with Dementia: Results from the National Health and Aging Trends Study. *J Am Geriatr Soc*. 2015 Aug;63(8):1503-11. PubMed PMID: 26200445; PubMed Central PMCID: PMC4778418.
7. Sheffrin M, Miao Y, Boscardin WJ, Steinman MA. Weight Loss Associated with Cholinesterase Inhibitors in Individuals with Dementia in a National Healthcare System. *J Am Geriatr Soc*. 2015 Aug;63(8):1512-8. PubMed PMID: 26234945; PubMed Central PMCID: PMC4737921.
8. Rogers SE, Thrasher AD, Miao Y, Boscardin WJ, Smith AK. Discrimination in Healthcare Settings is Associated with Disability in Older Adults: Health and Retirement Study, 2008-2012. *J Gen Intern Med*. 2015 Oct;30(10):1413-20. PubMed PMID: 25773918; PubMed Central PMCID: PMC4579241.
9. Smith AK, Cenzer IS, John Boscardin W, Ritchie CS, Wallhagen ML, Covinsky KE. Increase in Disability Prevalence Before Hip Fracture. *J Am Geriatr Soc*. 2015 Oct;63(10):2029-35. PubMed PMID: 26480970; PubMed Central PMCID: PMC4699653.
10. Chang F, O'Hare AM, Miao Y, Steinman MA. Use of Renally Inappropriate Medications in Older Veterans: A National Study. *J Am Geriatr Soc*. 2015 Nov;63(11):2290-7. PubMed PMID: 26503124; PubMed Central PMCID: PMC4733653.
11. Romo RD, Lee SJ, Miao Y, Boscardin WJ, Smith AK. Subjective, Objective, and Observed Long-term Survival: A Longitudinal Cohort Study. *JAMA Intern Med*. 2015 Dec;175(12):1986-8. PubMed PMID: 26502331; PubMed Central PMCID: PMC4699655.
12. Wang CW, Covinsky KE, Feng S, Hayssen H, Segev DL, Lai JC. Functional impairment in older liver transplantation candidates: From the functional assessment in liver transplantation study. *Liver Transpl*. 2015 Dec;21(12):1465-70. PubMed PMID: 26359787; PubMed Central PMCID: PMC4715618.
13. Dzeng E, Colaianni A, Roland M, Levine D, Kelly MP, Barclay S, Smith TJ. Moral Distress Amongst American Physician Trainees Regarding Futile Treatments at the End of Life: A

- Qualitative Study. *J Gen Intern Med.* 2016 Jan;31(1):93-9. PubMed PMID: 26391029; PubMed Central PMCID: PMC4700021.
14. Gardner RC, Hess CP, Brus-Ramer M, Possin KL, Cohn-Sheehy BI, Kramer JH, Berger MS, Yaffe K, Miller B, Rabinovici GD. Cavum Septum Pellucidum in Retired American Professional Football Players. *J Neurotrauma.* 2016 Jan 1;33(1):157-61. PubMed PMID: 25970145; PubMed Central PMCID: PMC4696427.
 15. Odden MC, McClure LA, Sawaya BP, White CL, Peralta CA, Field TS, Hart RG, Benavente OR, Pergola PE. Achieved Blood Pressure and Outcomes in the Secondary Prevention of Small Subcortical Strokes Trial. *Hypertension.* 2016 Jan;67(1):63-9. PubMed PMID: 26553236; PubMed Central PMCID: PMC4679688.
 16. Kurella Tamura M, Vittinghoff E, Yang J, Go AS, Seliger SL, Kusek JW, Lash J, Cohen DL, Simon J, Batuman V, Ordonez J, Makos G, Yaffe K. Anemia and risk for cognitive decline in chronic kidney disease. *BMC Nephrol.* 2016 Jan 28;17:13. PubMed PMID: 26823182; PubMed Central PMCID: PMC4730636.
 17. Lai JC, Dodge JL, Sen S, Covinsky K, Feng S. Functional decline in patients with cirrhosis awaiting liver transplantation: Results from the functional assessment in liver transplantation (FrAILT) study. *Hepatology.* 2016 Feb;63(2):574-80. PubMed PMID: 26517301; PubMed Central PMCID: PMC4718851.
 18. Sanford MT, Suskind AM. Neuromodulation in neurogenic bladder. *Transl Androl Urol.* 2016 Feb;5(1):117-26. PubMed PMID: 26904417; PubMed Central PMCID: PMC4739974.
 19. Peralta CA, McClure LA, Scherzer R, Odden MC, White CL, Shlipak M, Benavente O, Pergola P. Effect of Intensive Versus Usual Blood Pressure Control on Kidney Function Among Individuals With Prior Lacunar Stroke: A Post Hoc Analysis of the Secondary Prevention of Small Subcortical Strokes (SPS3) Randomized Trial. *Circulation.* 2016 Feb 9;133(6):584-91. PubMed PMID: 26762524; PubMed Central PMCID: PMC4829068.
 20. Brown RT, Hemati K, Riley ED, Lee CT, Ponath C, Tieu L, Guzman D, Kushel MB. Geriatric Conditions in a Population-Based Sample of Older Homeless Adults. *Gerontologist.* 2016 Feb 26;PubMed PMID: 26920935.
 21. Lee CT, Guzman D, Ponath C, Tieu L, Riley E, Kushel M. Residential patterns in older homeless adults: Results of a cluster analysis. *Soc Sci Med.* 2016 Mar;153:131-40. PubMed PMID: 26896877; PubMed Central PMCID: PMC4788540.
 22. John M, Greene M, Hessol NA, Zepf R, Parrott AH, Foreman C, Bourgeois J, Gandhi M, Hare CB. Geriatric Assessments And Association With Vacs Index Among Hiv-Infected Older Adults In San Francisco. *J Acquir Immune Defic Syndr.* 2016 Mar 29;PubMed PMID: 27028497; NIHMSID: 771332.
 23. Lai JC. Defining the threshold for too sick for transplant. *Curr Opin Organ Transplant.* 2016 Apr;21(2):127-32. PubMed PMID: 26825359; PubMed Central PMCID: PMC4786446.
 24. Suskind AM, Saigal CS, Hanley JM, Lai J, Setodji CM, Clemens JQ, Urologic Diseases of America Project. Incidence and Management of Uncomplicated Recurrent Urinary Tract Infections in a National Sample of Women in the United States. *Urology.* 2016 Apr;90:50-5. PubMed PMID: 26825489; PubMed Central PMCID: PMC4822518.
 25. Suskind AM, Walter LC, Jin C, Boscardin J, Sen S, Cooperberg MR, Finlayson E. Impact of frailty on complications in patients undergoing common urological procedures: a study from the American College of Surgeons National Surgical Quality Improvement database. *BJU Int.* 2016 May;117(5):836-42. PubMed PMID: 26691588; PubMed Central PMCID: PMC4833543.

26. Vijayaraghavan M, Tieu L, Ponath C, Guzman D, Kushel M. Tobacco Cessation Behaviors Among Older Homeless Adults: Results From the HOPE HOME Study. *Nicotine Tob Res.* 2016 Feb 26.
27. Smith AK, Ritchie CS, Wallhagen ML. Hearing Loss in Hospice and Palliative Care: A National Survey of Providers. *J Pain Symptom Manage.* 2016 Apr 1. pii: S0885-3924(16)30011-2.

Section V. External Advisory Board Members Names, Institutions and Years of service

The UCSF Pepper Center's External Advisory Committee was selected in 2013 and performed their most recent site visit in March 2016.

Committee Members:

Jean Kutner, MD, MSPH, University of Colorado School of Medicine (2013-present)

Mark Lachs, MD, Weill Medical College of Cornell University (2013-present)

Seth Landefeld, MD, University of Alabama at Birmingham (2013-present)

**The University of California, San Francisco
Claude D. Pepper Older Americans Independence Center**

2015-2016 Recognition and Awards

Ken Covinsky, MD, MPH

Harold S. Luft Award for Mentoring in Health Services and Health Policy Research – 2015

Louise Walter, MD

Inducted into the UCSF Chapter of the Alpha Omega Alpha Honor Medical Society – 2016

Named a Top Doctor in Marin County for Geriatrics in 2016

Kristine Yaffe, MD

Co-chaired an IOM report on Cognitive Aging: Public Health Dimensions, 2015

Invited to serve on the Alzheimer Association National Medical Scientific, 2015

American College of Psychiatrists Award for Research in Geriatric Psychiatry, presented at the National Academy of Sciences Symposium on Aging, 2015

Mike Steinman, MD

Mid-career Mentoring Award, Society of General Internal Medicine – 2015

Appointed to the Diabetes Overtreatment Expert Work Group convened by the National Center for Quality Assurance (NCQA) and Mathematica, Inc. – 2016

Named co-chair of the American Geriatrics Society Beers Criteria Update Expert Panel – 2016

Appointed to the Research Committee of the American Geriatrics Society – 2016

Christine Ritchie, MD, MSPH

Selected as member of the Palliative Care and End of Life Standing Committee of the National Quality Forum (NQF) – 2016

Named a Top Doctor in Marin County for Geriatrics in 2016

Brie Williams, MD, MS

Nominee, The Distinction in Mentoring Award, UCSF – 2015

Alex Smith, MD, MPH

Best scientific poster award at the Annual Older Americans Independence Centers annual meeting – 2016

Sei Lee, MD, MAS

Selected as the Vice-Chair for the American Geriatrics Society Quality and Performance Measurement Committee (AGS-QPMC) – 2016

Rebecca Brown, MD

American Geriatrics Society Outstanding Junior Investigator of the Year Award - 2016

American Geriatrics Society Outstanding Junior Research Manuscript Award - 2016

Society for General Internal Medicine Best Published Research Award - 2016

Ryan Greysen, MD

Society of Hospital Medicine Fellow in Hospital Medicine (FHM) – 2015
Society of Hospital Medicine Junior Investigator Award (Inaugural) – 2015
Society of General Internal Medicine Junior Investigator of the Year – 2016
American Geriatrics Society Outstanding Junior Investigator – 2016

Rebecca Sudore, MD

AGS Outstanding Scientific Achievement for Clinical Investigation Award – 2015
Inducted into American Society for Clinical Investigation – 2016
PREPARE website was a winning innovation in the Let's Get Healthy California Innovation Challenge – 2016
PREPARE website named UCSF Dept of Medicine Tech Challenge's Top 12 ideas – 2016

Jennifer Lai, MD

American Geriatrics Society New Investigator Award – 2015
Clinical Science Career Development Award by the American Society of Transplantation – 2016

Joaquin Anguera, PhD

UCSF Young Innovator Award - 2015

Julene Johnson, PhD

Invited speaker at the National Advisory Council on Aging for the Task Force on Minority Aging at the NIA – 2016

Margot Kushel, MD

Invited speaker at the National Association of Science Writers Annual meeting in Cambridge, MA – 2015

Raquel Gardner, MD

Harvard Medical School Loan Repayment Assistance Program Awardee - 2015

Jane Jih, MD, MPH

Selected to participate in National Institute on Aging Butler-Williams Scholars Program - 2015

Anne Suskind, MD, MS

AGS New Investigator Award – 2016

Eleni Linos, MD

Cancer Center Impact Award – 2016
Nominated Department Diversity Leader for Dermatology
Assistant Editor, JAMA Dermatology

Meredith Greene, MD

Plenary speaker for the New York State Clinical Conference on HIV and Hepatitis C – 2016

Caroline Stephens, RN, PhD, GNP

Best Health Information Technology Study Award - AGS Presidential Poster Session - 2015

The University of California, San Francisco
Claude D. Pepper Older Americans Independence Center

Minority Research

General Brief Description of Minority Activities:

The UCSF OAIC developed an active collaboration with the UCSF Center for Aging in Diverse Communities (CADC)—an NIA Resource Center for Minority Aging Research—led previously by Dr. Eliseo Perez-Stable and since 2015, by Dr. Anna Napoles. After the launch of the UCSF OAIC, Dr. Covinsky presented the mission and work of the UCSF OAIC to the CADC faculty and trainees, and we developed a process to make OAIC core resources available to the CADC. We collaborated with the CADC on their pilot studies RFA in 2014, supporting Dr. Joaquin Anguera, and in 2015, supporting Drs. Maya Vijayaraghavan and Christine Valdez. In 2016, we are collaborating with the CADC for the third year to co-fund a pilot award to Dr. Maria Ventura focused on dance therapy to address Parkinson's Disease symptoms in ethnically diverse patients.

Minority Trainees/Investigators:

The RCDC and PESC seek to encourage diversity among investigators by outreach programs that encourage applications from women and minority investigators. In year 3, all five of the RCDC funded investigators and 8 of the PESC funded investigators were women. One of our pilot awardees is from a group included in the NIH definition of persons underrepresented in biomedical research. (Dr. Peralta-Hispanic/Latina.) Over the life of our Center, 82% of our PESC awardees have been women and 24% under-represented minorities. Among our RCDC scholars/advanced scholars, 75% have been women and 17% under-represented minorities.

Minority-Related Research Projects:

PESC Awardee, Christine Valdez, PhD, was awarded a joint award between the UCSF Pepper Center and the UCSF Center for Aging in Diverse Communities in 2015. Dr. Valdez has co-developed the Posttraumatic Information Processing Scales (PIPS), a measure of trauma cognitions that assesses positive and negative trauma cognitions linked to trauma-focused therapy goals. The PIPS is undergoing preliminary validation in English-speaking student and online samples. This study is translating the PIPS into Spanish and validating it with a Latino population that is at high risk for trauma and negative reactions. The aims of this study are to: 1) translate and adapt the PIPS for Spanish-speaking therapy clients; 2) conduct a psychometric evaluation of the PIPS with Latino older adults seeking specialized clinical services for trauma-focused therapy; and 3) pilot test the use of PIPS with Latino clients in trauma-focused therapy.

PESC Awardee, Maya Vijayaraghavan, MD, MAS, was awarded a joint award between the UCSF Pepper Center and the UCSF Center for Aging in Diverse Communities in 2015. Dr. Vijayaraghavan is developing an intervention to increase smoking cessation among older, African-American homeless smokers. She is recruiting a sub-group of 30 African-American current smokers from an established cohort of 350 homeless adults, of whom 80% are African-American (The Aging Homeless Cohort Study, PI, Margot Kushel, MD), to conduct in-depth, semi-structured interviews to identify new tobacco control strategies for this population.

In Year 4, the UCSF OAIC will co-fund a joint award with the UCSF Center for Aging in Diverse Communities to Maria Ventura, PhD. Dr. Ventura's project will seek to describe perceptions of community-based dance among diverse older adults with Parkinson's Disease (PD) and identify barriers and facilitators to dance engagement. She will describe attitudes, beliefs, and opinions about dance in racial/ethnic minorities. Four small focus groups, each consisting of 5 participants from the same racial/ethnic group (e.g., African-American, Asian, Latino, and White), will be conducted with men and women with PD aged 50-80. Questions will focus on experiences and knowledge of dance, and beliefs about the benefits of dance. This will identify racial/ethnic preferences for specific dance styles and identify strategies to engage racial/ethnic minorities in alternative arts-based treatment strategies such as dance.

PESC Awardee, Joaquin Anguera, PhD, was awarded a joint award between the UCSF Pepper Center and the UCSF Center for Aging in Diverse Communities in 2014. Dr. Anguera is a neuroscientist who specializes in developing & implementing cognitive training interventions. Currently, he works to translate the BRIGHTEN study's cognitive assessment tool into Spanish to deploy it into Spanish-speaking communities.

Alex Smith MD, MPH, a Years 1 & 2 RCDC Advanced Scholar, has a strong interest in understanding how cultural factors influence the perspectives and experiences of patients with serious illness or disability and their families. For example, in a recent study, Dr. Smith found that two-thirds of Chinese American, African American, Latino, and white elders with disability would want to be told their prognosis if they had less than 5 years left to live. He therefore argues that clinicians should offer to discuss prognosis with their very elderly patients, both because it allows for more informed medical decision making and because many patients want to know so they can prepare for the future. Dr. Smith's recent work has examined cultural differences in how informal caregivers view their role in caring for older adults aging in the community, and how this role affects caregivers' quality of life. Another study explored preferences for communication about prognosis, which may vary depending on one's unique cultural history.

Pilot Awardee Rebecca Sudore, MD's primary research focus is on improving advance care planning and medical decision making for vulnerable older adults with limited health literacy. She published the first prospective study demonstrating the effect of limited literacy on mortality in the elderly and has shown that elders with limited literacy have greater difficulty making medical decisions for informed consent and advance care planning. She has also designed and tested an informed consent process for patients with limited literacy and an advance directive that is both literacy and culturally appropriate. The goal her pilot study is to obtain preliminary data about the efficacy of an interactive, multimedia web-based intervention, called PREPARE, designed to improve decision making for these diverse, older adults. Dr. Sudore recently received a three-year PCORI grant to develop PREPARE in Spanish and test with Hispanic users. The Hispanic and Latino population is increasing in the US, with an estimated 3 million Latinos aged 65 years and older. This population is expected to increase six-fold by 2030.

In addition to the specific projects listed above, many of the RCDC scholars and PESC awardees are conducting research using populations or datasets that include large proportions of women and ethnic minority subjects.

2015-2016 Publications Pertaining to Minority Research:

- Vijayaraghavan M, Tieu L, Ponath C, Guzman D, Kushel M. Tobacco Cessation Behaviors Among Older Homeless Adults: Results From the HOPE HOME Study. *Nicotine Tob Res.* 2016 Feb 26.
- Smith AK, Ritchie CS, Wallhagen ML. Hearing Loss in Hospice and Palliative Care: A National Survey of Providers. *J Pain Symptom Manage.* 2016 Apr 1. pii: S0885-3924(16)30011-2.
- Hunt LJ, Covinsky KE, Yaffe K, Stephens CE, Miao Y, Boscardin WJ, Smith AK. Pain in Community-Dwelling Older Adults with Dementia: Results from the National Health and Aging Trends Study. *J Am Geriatr Soc.* 2015 Aug;63(8):1503-11.
- Smith AK, Cenzer IS, John Boscardin W, Ritchie CS, Wallhagen ML, Covinsky KE. Increase in Disability Prevalence Before Hip Fracture. *J Am Geriatr Soc.* 2015 Oct;63(10):2029-35.
- Romo RD, Lee SJ, Miao Y, Boscardin WJ, Smith AK. Subjective, Objective, and Observed Long-term Survival: A Longitudinal Cohort Study. *JAMA Intern Med.* 2015 Dec;175(12):1986-8. doi: 10.1001/jamainternmed.2015.5542.
- Rogers SE, Thrasher AD, Miao Y, Boscardin WJ, Smith AK. Discrimination in Healthcare Settings is Associated with Disability in Older Adults: Health and Retirement Study, 2008-2012. *J Gen Intern Med.* 2015 Oct;30(10):1413-20. doi: 10.1007/s11606-015-3233-6. Epub 2015 Mar 13.
- Odden MC, McClure LA, Sawaya BP, White CL, Peralta CA, Field TS, Hart RG, Benavente OR, Pergola PE. Achieved Blood Pressure and Outcomes in the Secondary Prevention of Small Subcortical Strokes Trial. *Hypertension.* 2016 Jan;67(1):63-9.
- Peralta CA, McClure LA, Scherzer R, Odden MC, White CL, Shlipak M, Benavente O, Pergola P. Effect of Intensive Versus Usual Blood Pressure Control on Kidney Function Among Individuals With Prior Lacunar Stroke: A Post Hoc Analysis of the Secondary Prevention of Small Subcortical Strokes (SPS3) Randomized Trial. *Circulation.* 2016 Feb 9;133(6):584-91.

Previous Year Publications Pertaining to Minority Research:

- Ahalt C, Trestman RL, Rich JD, Greifinger RB, Williams BA. Paying the price: the pressing need for quality, cost, and outcomes data to improve correctional health care for older prisoners. *J Am Geriatr Soc.* 2013 Nov;61(11):2013-9.
- Soones T, Ahalt C, Garrigues S, Faigman D, Williams BA. "My older clients fall through every crack in the system": geriatrics knowledge of legal professionals. *J Am Geriatr Soc.* 2014 Apr;62(4):734-9.
- Brown RT, Ahalt C, Steinman MA, Kruger K, Williams BA. Police on the front line of community geriatric health care: challenges and opportunities. *J Am Geriatr Soc.* 2014 Nov;62(11):2191-8.
- Rich JD, Chandler R, Williams BA, Dumont D, Wang EA, Taxman FS, Allen SA, Clarke JG, Greifinger RB, Wildeman C, Osher FC, Rosenberg S, Haney C, Mauer M, Western B. How health care reform can transform the health of criminal justice-involved individuals. *Health Aff (Millwood).* 2014 Mar;33(3):462-7.
- Rich JD, Allen SA, Williams BA. N Engl J Med. Responding to hepatitis C through the criminal justice system. 2014 May 15;370(20):1871-4.

- Chodos AH, Ahalt C, Cenzer IS, Myers J, Goldenson J, Williams BA. Older jail inmates and community acute care use. *Am J Public Health*. 2014 Sep;104(9):1728-33. doi: 10.2105/AJPH.2014.301952. Epub 2014 Jul 17. PMID: 25033146
- Brown RT, Ahalt C, Steinman MA, Kruger K, Williams BA. Police on the front line of community geriatric health care: challenges and opportunities. *J Am Geriatr Soc*. 2014 Nov;62(11):2191-8. doi: 10.1111/jgs.13093. Epub 2014 Nov 6.
- Rich JD, Allen SA, Williams BA. The Need for Higher Standards in Correctional Healthcare to Improve Public Health. *J Gen Intern Med*. 2014 Dec 19.
- Williams BA, Ahalt C, Stijacic-Cenzer I, Smith AK, Goldenson J, Ritchie CS. Pain behind bars: the epidemiology of pain in older jail inmates in a county jail. *J Palliat Med*. 2014 Dec;17(12):1336-43.
- Ahalt C, Bolano M, Wang EA, Williams B. The state of research funding from the national institutes of health for criminal justice health research. *Ann Intern Med*. 2015 Mar 3;162(5):345-52.