DGIM Project Summary

**Name of Project:** Identifying and Assessing Food Insecurity in Older Diverse Primary Care Patients

**Investigator(s).** (Include phone numbers & email address, indicate PI and primary contact)
PI and primary contact: Jane Jih, MD - jane.jih@ucsf.edu
Co-investigator: Tung Nguyen, MD - tung.nguyen@ucsf.edu
Co-investigator: Christine Ritchie, MD - christine.ritchie@ucsf.edu
Co-investigator: Anna Napoles, PhD - anapoles@ucsf.edu
Co-investigator: Hilary Seligman, MD - hilary.seligman@ucsf.edu

**Research question(s):**
AIM 1: Describe the prevalence of food insecurity and associated clinical characteristics in diverse older adult patients with MCC.
AIM 2: Assess the utility of Photovoice for eliciting patient attitudes and behaviors regarding their food insecurity.
AIM 3: Assess the feasibility, acceptability and potential impact of incorporating Photovoice as a communication and assessment tool for food insecurity in the primary care setting.

**Brief Background/Significance:**
Food insecurity is an increasingly significant public health issue, particularly as the demographics of the aging population change. From 2001 to 2011, the number of older adults age 60+ who were food insecure more than doubled to 4.8 million. By 2025, this number is projected to rise by 50%. Factors associated with food insecurity among older adults include age 60-69, having low income, having a functional limitation, having multiple chronic conditions (MCC) or identifying as African American or Latino.

Older adults with MCC are vulnerable to the effects of food insecurity and food insecurity is a determinant of health that is under-recognized in the primary care of older adult patients. An estimated 60-75% of older adults have MCC, defined as 2+ concurrent chronic conditions, many of which are nutrition-sensitive (e.g. diabetes, hypertension). Food insecurity leads to nutritional compromise through reduced food intake, missed meals and change of eating habits to include energy dense foods that are often high in added sugar and fat. Food insecurity contributes to the development or exacerbation of chronic disease such as diabetes and food insecure older adults with MCC may struggle to attain the recommended diets for specific chronic conditions. While some studies have identified food insecurity in households with children, little work has been done on food insecurity in older adult patients in primary care.

A geriatric approach in primary care to the clinical assessment of and communication about food insecurity among older adult patients with MCC may be enhanced by incorporating Photovoice. Photovoice is a qualitative methodology which involves a) photo taking by participants to show their experiences relevant to a health issue and b) dialogue, reflection and action around the issue through sharing of photos. While Photovoice has been used in community-based research, it has not been tested in geriatric primary care as a tool to help PCPs and older adult patients address food insecurity through a comprehensive geriatric approach. Photovoice could have important applications in facilitating patient-PCP communication around sensitive topics such as food insecurity and may be a patient-centered approach for PCPs to more fully assess the environmental and socio-cultural contexts that affect the health of vulnerable geriatric patients.

**Inclusion/exclusion criteria (list)**
Eligible patients for Aim 1 are defined as: 1) age 60 or older; 2) 2 or more chronic disease diagnoses (e.g. diabetes, hypertension, depression) defined as MCC; 3) male or female; 4)
speak English, Spanish or Chinese; and 5) at least 1 DGIM clinic visit in the preceding 12 months. Additional inclusion criteria for Aim 2 include the ability to use a disposable camera. All patient participants that complete Aim 2 are eligible for Aim 3. Eligibility criteria for PCPs in Aim 3 are: 1) age 18 or older; 2) male or female; 3) have a MD or NP degree and are designated as a PCP by the DGIM clinics; and 4) have a patient who participated in Aim 2.

Method of contact/recruitment (be specific)
For Aim 1, using the EHR, we will generate a list of eligible patients. PCPs will receive a list of their eligible patients with a request to identify those who should be excluded. We will contact eligible patients by letter explaining the study and the letter will include a phone number to call to refuse participation. If we do not receive a call within 7-10 days of mailing, a bilingual (English/Spanish, English/Chinese) research assistant (RA) will call the patient to ask about study participation. From the Aim 1 participants, we will recruit by telephone 20 food insecure patients who can use a disposable camera to participate in Aim 2. All Aim 2 participants are eligible to participate in Aim 3. The willingness and comfort of participants to share their photos with their PCP (physician or NP) will be assessed at the end of Aim 2. Aim 3 participants will identify a PCP in which a) they are willing to share their photos and b) a clinic visit is already scheduled within the next 4 months. We will approach the PCP to participate by email. The email will describe how their patient may bring photos to share with them in a visit.

Benefits/burden for participants (clearly identify potential for harm)
We recognize that there is a psychological risk as participating patients may experience discomfort or distress when discussing food insecurity. We believe this risk to be minimal. Furthermore, none of the content to which patients are exposed in this study falls outside the scope of regular healthcare practice. We do not draw blood or obtain any biospecimen as part of the study. Clinical characteristics related to chronic disease management will be ascertained through the EHR and are part of routine care. All study materials including recruitment scripts and consent forms will be available in English, Spanish and Chinese. A language concordant RA will consent participants and conduct study activities in the language that the participant prefers. The main potential risks to patients are loss of confidentiality and invasion of privacy. Knowledge gained by individual patient participants may facilitate self-empowerment and improve communication with their PCP which is a benefit.

Any benefits or burden to DGIM practitioners?
A potential risk to PCP is psychological risk such as anxiety or discomfort generated by discussing a sensitive topic such as food insecurity and learning that the PCP’s patient may be making trade-offs in self-management of chronic disease. PCPs may not be certain how to respond to photos brought in by their patients. There is also a risk of loss of confidentiality and invasion of privacy. Knowledge gained by individual PCPs may lead to improvement in the management of MCC within the context of food insecurity.

Timeline for recruitment (projected start and stop dates)
Aim 1 start date: January 2016 upon approval from DGIM; Aim 2 start date: August 2016; Aim 3 start date: October 2016; Study stop date: June 2017

Funding source: National Institute on Aging (1R03AG050880)

Potential for DGIM collaborators? (We encourage DGIM resident and fellow involvement in particular) Yes. This study includes DGIM collaborators and we invite resident and fellow involvement.

Do you agree to notify us when recruitment is completed? Yes
Date form completed: January 18, 2016