(3) strategize ways to collectively model and practice in cultural humility in one’s personal and professional life.

REFLECTIONS ON APPLYING ANTI-RACIST PEDAGOGY TO TEACHING ABOUT AGING
Rona Karasik, and Kyoko Kishimoto, Saint Cloud State University, SAINT CLOUD, Minnesota, United States

Racial disparities are well documented in all facets of aging (e.g., health, housing, retirement). Helping gerontology students to recognize racial inequity, however, is only the first step toward effecting change. Empowering students to investigate root causes of these disparities (e.g., power relations) is essential in order to begin to identify ways to dismantle institutional racism and create systems that are more equitable. With its attention to historical/political context and fostering skills for critical analyses and social change, anti-racist pedagogy offers educators a framework from which to introduce and explore these issues (Karasik & Kishimoto, 2020). This session will consider how anti-racist pedagogy may be applied within the gerontological curriculum using examples of teaching about (1) retirement and (2) housing for older adults. Associated challenges such as finding and preparing appropriate material, as well as engaging students and faculty in work they are unfamiliar and/or uncomfortable with will also be discussed.

CONSIDERATIONS IN CURRICULUM DESIGN FOR TEACHING ABOUT RACE AND RACISM IN GERONTOLOGY
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The recognition of structural racism as a public health crisis has enlarged the breadth and depth of discussions of the unique “Isms” in higher education classrooms. A significant number of undergraduate or graduate level gerontology programs participate in the delivery of training through instruction on the topics of aging, gerontology, or long-term care administration to future labor market participants. Absent from these classroom conversations, however, has been an analysis of how syntax, the analytical vocabulary, and other framing of such conversations can impact learners. While these educational programs provide highly critical information on disease, illness and injury prevention, self-care, population health, and other topics, professors can also introduce perspectives on race, racism, and how they may be related to the delivering of care to the aging population. Specifically, this session will introduce an example of curricular design for the identification of structural racism in the operation of long-term care institutions.

Session 1475 (Symposium)

TECHNOLOGY TO SUPPORT SELF-REGULATION IN OLDER ADULTHOOD: INSIGHTS FROM DESIGN TO IMPLEMENTATION
Chair: Shannon Meija
Discussant: Hans-Werner Wahl

Across the lifespan, individuals adapt to change through the careful monitoring and adjustment of goals, demands, and performance—processes of self-regulation. Technology in support of self-regulatory processes may compensate for deficiencies in the ability to set, monitor, and work toward goals. Our purpose in this symposium is to forward the discourse on how health technology—from design to implementation—can assist older adults in their efforts to support their health and well-being in daily life. Our symposium begins with design considerations for technologies that support processes of information seeking, reflection, and action. Chin presents a process for designing conversation agents that guide dialogues with older adults to support informal self-regulated learning of health information. Nie and colleagues synthesize the literature on visual feedback to provide a framework that illustrates how visual design elements can link feedback to action. The symposium continues with papers that speak to older adults’ experiences using technology to accomplish their goals. Mejia and colleagues use insight from older adults who had self-assessed their balance for 30 consecutive days to explore themes of self-monitoring accuracy and feedback preferences. Francis and colleagues use data from the Detroit-based Social Relations Study to illustrate how technology use and its implications vary when older adults engage with their weaker social ties. The symposium will conclude with a discussion led by Wahl, who will situate the papers, and the discourse on health technology design and application, within lifespan developmental and action perspectives on aging.

DESIGNING CONVERSATIONAL AGENTS TO SUPPORT SELF-REGULATED LEARNING FOR OLDER ADULTS
Jessie Chin,1 and Smit Desai,2 1. University of Illinois at Urbana-Champaign, Urbana, Champaign, Illinois, United States, 2. University of Illinois, Urbana Champaign, Champaign, Illinois, United States

The rapid growth of the off-the-shelf smart speakers (such as Amazon Alexa and Google Home), also called Conversational Agents (CAs), creates potential to deliver everyday life support to users at home (such as checking weather, listening to news, scheduling events). Literature demonstrated the technology acceptance of CAs among older adults (including novice users) given the low barriers to use CAs. The natural conversations among CAs and users enable the opportunities to build deeper understandings about a topic through theory-driven guided dialogues. Our study has designed the metacognition strategies in the guided dialogues of CAs to support informal self-regulated learning of health information among older adults. The study has shown the feasibility and acceptance of CAs to help older adults learn new health information on their own through these guided dialogues. Additional analyses on the feasibilities to implement different metacognitive strategies in guided dialogues in the off-the-shelf CAs were also conducted.

DESIGNING BEHAVIORAL FEEDBACK VISUALIZATIONS TO SUPPORT HEALTH BEHAVIOR CHANGE
Qiong Nie,1 Daniel Morrow,2 Maurita Harris,1 and Wendy Rogers,2 1. University of Illinois at Urbana Champaign, Urbana, Illinois, United States, 2. University of Illinois Urbana-Champaign, Champaign, Illinois, United States
Health technology has the potential to support behavior change by measuring performance and providing users with visualizations of this performance as feedback. Such visual feedback has had limited success in changing health behaviors, but it is not clear why. We conducted a systematic review of the visual feedback literature to develop an organizational framework representing the visual feedback-action process. We identified the components that have been investigated in the context of visual feedback. These components are classified into four categories: visualization types (e.g., bar graph); and variables (e.g., color); feedback characteristics (e.g., social comparison); psychological processes (e.g., motivation); and action (e.g., exercise). The insights will inform the design of feedback visualizations in a smartphone application to support medication adherence for older adults. More broadly, this integrative perspective will yield principles of feedback visualization techniques and components that influence the behavior change process and develop a roadmap to facilitate the design.

PERSPECTIVES ON HOW FALL PREVENTION TECHNOLOGIES CAN SUPPORT OLDER ADULTS’ SELF-MONITORING PROCESSES
Shannon Mejia, Sungjae Hong, Aileen Griffin, Tai-Te Su, and Jacob Rosnoff, 1 University of Illinois at Urbana-Champaign, Illinois, United States, 2 University of Illinois at Urbana-Champaign, Aurora, Illinois, United States, 3 University of Illinois at Urbana-Champaign, Champaign, Illinois, United States, 4 School of Health Professions, University of Kansas Medical Center, Kansas City, Kansas, United States

Fall risk increases as older adults lose the functional resources necessary to maintain balance while completing everyday activities. As functional resources often decline gradually with age, momentary deficits may not be apparent until after a fall occurs. Mobile fall prevention technologies could support older adults in self-monitoring their ability to safely navigate their environments. In this paper we present perspectives on self-monitoring and feedback in a sample of older adults (n=20, 50% female, age 65+) who had self-assessed their balance via a smartphone for 30 consecutive days. Thematic analysis of semi-structured interviews showed that fall history differentiated a) participants’ awareness of day-to-day variation in functional ability; b) trust in the accuracy of self-monitoring; and c) imaginations of what types of feedback a mobile fall prevention technology should provide. Insight on older adults’ internal self-monitoring processes and guidelines for feedback design are discussed.

WEAK TIES THAT BIND: ICT USE, SOCIAL RELATIONS, AND DEPRESSIVE SYMPTOMS AMONG OLDER ADULTS
Jess Francis, Noah Webster, and Nour Fakhoury, University of Michigan, Ann Arbor, Michigan, United States

Increased attention. Using data from the Detroit-based Social Relations Study collected in 2015, we examine the extent to which separate dimensions of weak ties (contact frequency and network size) mediate and moderate the link between technology use and depressive symptoms among adults age 65+ (n=213). A greater number of less close relations mediated the link as it was associated with technology use and fewer depressive symptoms. A moderating effect was also found as technology use was associated with fewer depressive symptoms only among those with lower contact frequency.

Session 1480 (Symposium)

THE STUDY OF MUSCLE, MOBILITY, AND AGING (SOMMA): AN OVERVIEW
Chair: Steve Cummings
Co-Chair: Peggy Cawthon
Discussant: Russell Hepple

SOMMA is an NIA-funded cohort study to identify biological determinants of mobility and fitness. The overall aim of SOMMA is to use biopsies, novel biomarkers, advanced imaging, and intensive physical and cognitive assessments to elucidate the biological processes that contribute to changes in mobility and physical fitness with aging. SOMMA will recruit 875 people age 70+ (of whom about 200 have been enrolled.) We take biopsies of the vastus lateralis muscle to quantify mitochondrial content and function of the electron transport chain. We use 31P MR spectroscopy to quantify mitochondrial capacity to generate ATP in quadriceps muscle (ATPmax). We will quantify other biological properties in biopsies including denervation, autophagy and accumulated biochemical damage and use gene expression to discover pathways that contribute to mobility and fitness. SOMMA uses MR for quadriceps volume and D3Cr dilution for total skeletal muscle mass, cardiopulmonary exercise testing to measure fitness (VO2 peak). We are also making many other intensive assessments of physical and cognitive function. Mobility endpoints include baseline and three year change in 400 m and 4 meter gait speed and fitness. SOMMA is building a large biobank of muscle, adipose blood, and urine specimens that will be available for ancillary studies. In this Symposium, we will present results from analyses of associations between muscle mitochondrial function and strength, muscle mass, cognitive performance, gait speed, and fitness.

INITIAL RESULTS FROM SOMMA: CONTRIBUTION OF MITOCHONDRIAL FUNCTION TO WALKING AND FITNESS
Steve Cummings, Peggy Cawthon, Bret Goodpaster, Russell Hepple, Nancy W. Glynn, Stephen Kritchevsky, Anne Newman, and Paul Coen, 1 University of Florida, Gainsville, Florida, United States, 2 AdventHealth, Orlando, Florida, United States, 3 University of Florida, Gainsville, Florida, United States, 4 University of Pittsburgh Graduate School of Public Health, Pittsburgh, Pennsylvania, United States, 5 Wake Forest School of Medicine, Winston Salem, North Carolina, United States, 6 University of Pittsburgh, Pittsburgh, Pennsylvania, United States