MARYLAND COMMISSION ON AGING
Videoconference
April 13, 2022
MEETING MINUTES

Members Present:
Rose Maria Li, Chair; Paula Blackwell; John Haaga; Joy Hatchette; Barry Liden; Jay Magaziner; George Rebok; Carmel Roques; David Roth; Sharon Saunders; Allen Tien; Hon. Benjamin Kramer; Hon. Kathy Szeliga

Department of Aging Staff:
Rona E. Kramer, Secretary of the Maryland Department of Aging (MDoA)
Rosanne B. Hanratty, Staff to the Commission
Angie Heim, Executive Assistant

Other:
Peter M Abadir, MD, Associate Professor of Medicine, Division of Geriatrics Medicine & Gerontology, the Johns Hopkins University School of Medicine; Co-Principal Investigator, Johns Hopkins University AITC
Derek Smith, Rose Li and Associates

Greetings and Welcome
Dr. Li greeted Commissioners, staff, presenters and guests.

Approval of Prior Meeting Minutes
The minutes from the February 9, 2022 videoconference meeting of the Commission on Aging Meeting were approved with changes.

Program Overview of AITC Program – Rose Maria Li, MBA, PhD, Chair
Dr. Li is Principal Investigator of the National Institute on Aging (NIA) Artificial Intelligence and Technology Collaboratories (AITC) for Aging Research Coordinating Center. She explained that the Collaboratories are designed to foster the interface of advances in, and application of, technology and artificial intelligence and aging research. The NIA has designated substantial amounts of federal funds for pilot awards to various organizations including universities and federal and state agencies and private enterprises. Reflective of efforts to recruit a diversity of collaboratory partners, approximately 50% of all pilot award applications in the first year of the AITC program were from academia and 50% from industry.

Johns Hopkins University AITC-- Peter M. Abadir, MD
Dr. Abadir drew an analogy to the system of human capillaries and the goals of the overall project. He explained that these tiny blood vessels both supply red blood cells that transport

oxygen to the organs, and transport waste products away from the organs. Akin to the multi-function capillary system, the Johns Hopkins AITC has an overarching goal of building an interdisciplinary and translational ecosystem.

Within the Johns Hopkins AITC there are eight core centers: Administration; Key Stakeholder Engagement; Technology Identification and Training; Clinical Translation and Validation; Network and Mentoring; Data Integration and Quality; and two pilot cores:

- Pilot Core A-Alzheimer's Disease and Dementia—has a goal of selecting and assisting the implementation of technologies focused older adults living with cognitive issues and their caregivers.
- Pilot Core B--Physical Elements of Aging—has a goal of addressing physical declines with aging and developing technologies to address declines.

Participants in the core centers include the Schools of Medicine, Engineering, Business, Public Health, and Nursing, as well as the Applied Physics lab. The Hopkins AITC has an advisory committee. The Key Stakeholders Core is designed to ensure that there is an intentional focus on geographical diversity as well as underserved groups of patients and caregivers. It is designed to ensure that as technology is developed there is input from diverse communities and advocacy groups.

Dr. Abadir observed that the schools of business, engineering and medicine are geographically located in varying parts of the large university/medical campus. Physical location, alone, as well as a lack of routine experience working collaboratively contribute to "siloing" of efforts. At Hopkins, geriatrics-focused clinical programs, such as the Memory and Alzheimer's Clinic and other geriatric-related medical specialties, and research focused on older adults are co-located at the Bayview campus. Bayview is also the site of all of Johns Hopkins' National Institutes of Health (NIH) extramural research related to aging. A dearth of intentional cross-discipline collaboration may also contribute to "siloing" of efforts--when in fact such efforts may be complementary or synergistic. Nevertheless, Dr. Abadir emphasized he views these as presenting opportunities, not challenges for interdisciplinary cross-fertilization.

As an example of interconnected and interdisciplinary issues that arise with aging, Dr. Abadir described cognitive and functional decline that in turn contribute to frailty syndrome, which is traditionally characterized as largely physical. All types of decline were exacerbated by ameliorations to address the COVID 19 pandemic`, such as lockdowns and closure of senior centers, restaurants, and gyms. At the outset and prior to wide vaccination availability, older adults may have received fewer visitors because of fears of transmission. Thus, even if an older adult did not get COVID, opportunities to engage in normal activities such as shopping and social interaction contributed to a process of decreasing physical and cognitive activities accompanied by the advent or worsening of fragility syndrome.

Interventions in such processes occur as one ages--before frailty sets in—contribute to healthier aging. Effective interventions are not merely medical, however. In fact, some

number of improvements in function are likely at the intersection between engineering and medicine. For example, one avenue of investigation and piloting deals with the applicability of AI technology to detect cognitive decline and its resulting weaknesses. The Center for Transformative Geriatrics and the Gerotech program that Dr. Abadir leads bring medical and engineering students together to develop opportunities and strategically focus on use of promising technologies to stimulate healthy aging and address decline in older adults.

The objective of Johns Hopkins Pilot Core A is to act as an incubator to quickly assess feasibility of an innovation(s) and quickly ready it to be brought to market—not conducting a multi-year research project. Dr. Abadir explained that an example of a next step might be to apply for a Small Business Innovation Research (SBIR) award. These awards are designed to Increase private sector commercialization of innovations developed through federal funding.

Dr. Rebok asked about opportunities for students, such as those in the Hopkins Bloomberg School of Public Health, to participate in such projects. Dr. Abadir indicated a willingness to facilitate such a partnership. Dr. Haaga asked about the types of proposals that are being submitted—acknowledging constraints on disclosure of the content of individual applications. Dr. Abadir replied that proposals range from basic to complex, e.g., robotics to assist with triaging in hospital emergency departments, or to provide social stimulation and detect adverse events in the home. As another example, Dr. Abadir noted cognitive issues may first be apparent through changes in a person's speech—in volume, content, and pattern such as increased pauses--and detection of such changes through the use of technology, such as safety sensors and cameras, could be very useful.

Dr. Abadir explained that Hopkins is well-situated for a project such as AITC collaboratories because it has a broad clinical base and potential patient populations to conduct clinical translation and validation of innovations. Secretary Kramer asked about timelines from identifying an innovation, validating it, through bringing it to market for commercial use. Dr. Abadir stated timeframes vary because of a range of factors. Academic development may differ from industry development. Technologies already in the patent application process tend to reach the market more quickly. Innovative uses of robotics may take a shorter amount of time as compared to direct medical innovations for which clinical validation is necessary. Clinical validation also likely includes approval by an institutional review board—which, while certainly contributing to subject/patient protection, can add a sizable amount of time before testing is implemented.

Dr. Li wondered if the Communities for Life^{SM} program could provide a population of subscribers willing to test non-invasive innovations such as wearables. Dr. Abadir cautioned that pilots ideally include diverse populations—for example, racially and ethnically. In addition, consideration must be taken of other participant characteristics such as residential location—rural, urban suburban, mobility—those who are homebound vs. those with more mobility options, and those having good cognitive functioning vs. those with deficits in cognition.   Dr. Li noted that it is, nevertheless, important to get baseline measures in a healthy population and that state programs might provide such populations. Secretary Kramer observed that

Department of Aging programs included a range of populations—racially and ethnically, rural, urban and suburban, from varying economic levels, as well as those having access to and comfort with using technologies such as Wi-Fi and a multitude of devices.

Secretary's Remarks: Rona E. Kramer, Secretary of the Maryland Department of Aging

The Secretary informed Commissioners that the Department fared very well in the 2022 legislative session. Governor Hogan added $6 million to the Department's budget that will allow the Department to fully fund innovations, such as the Durable Medical Equipment (DME) Reuse Program and CFL^{SM}, that are designed to facilitate nursing home diversion and assist older adults to age in place. Maryland's Area Agencies on Aging (AAAs) have been fully funded. Additional monies are earmarked to go to enhanced information and assistance services. She thanked Commissioners for their individual assistance during the legislative session.

The Department is also funded to implement *Bridging Voice*, which provides voice communication enhancements for people with neurodegenerative diseases, including amyotrophic lateral sclerosis (ALS), multiple system atrophy (MSA), muscular dystrophy, multiple sclerosis, and Parkinson's disease. The Maryland program will provide computer access and communication technology to people living with ALS. Secretary Kramer said that it is designed to serve approximately 375 Marylanders with ALS and will be coupled with participation in the DME Reuse Program.

The state has mounted a vigorous program to encourage people to get COVID 19 vaccination boosters and is using recorded messaging to reach large numbers of people. For example, Secretary Kramer said that she recorded a video to promote vaccination. The Department also is coordinating vaccination efforts through all of its available avenues, for example, through AAAs and the Senor Call Check, CFL^{SM} and DME programs.

The Secretary identified a need for members of the aging network, such as AAAs, to more fully embrace enrollment efforts for innovations such as CFL^{SM} and Senior Call Check. She said that the Department will hire an experienced communications professional with experience marketing to older adults. Low state salary levels may negatively affect hiring efforts. Dr. Saunders observed that medical providers would be interested in cost-effective programs to assist their patients in maintaining good health and ability to age in place. She identified organizations of medical professionals—such as those for physicians, nurses and others—that might be approached. Secretary Kramer said that outreach has been undertaken to a wide variety of organizations and that she will further pursue Dr. Saunders's recommendations.

Dr. Magaziner inquired about the status of the evaluation of the CFL^{SM} program. Secretary Kramer indicated that she had recently had a call with the Administration for Community Living (ACL) about the $2.8 million, 3.5 year grant to assess the CFL^{SM} program. Grant monies will be used to subsidize membership in the CFL^{SM} program for approximately 1200 Medicaid participants, a number sufficient to provide the requisite number of participants to form a basis for conclusions. The Department will have CRISP, the state-designated health information exchange for Maryland, as a data partner on the project.

Dr. Li reminded members of the upcoming meetings of the Commission.

Adjournment
The meeting adjourned at 11:35 AM.

Minutes prepared by Rosanne B. Hanratty