



**The National Institute on Aging
Artificial Intelligence and Technology
Collaboratories
for Aging Research Program**



PROGRAM FOCUS

The **A**rtificial Intelligence and Technology Collaboratories (AITC) for **A**ging Research are dedicated to helping Americans live longer, healthier lives through the application of artificial intelligence and emerging technologies that improve health and well being.



PROGRAM STRUCTURE



The a2 Collective comprises three AITC Collaboratories centered at Johns Hopkins University (JH AITC), the University of Massachusetts Amherst (MassAITC), and the University of Pennsylvania (PennAITech) and the a2 Collective Coordinating Center managed by Rose Li & Associates, Inc. (RLA).



Johns Hopkins Artificial Intelligence and Technology Collaboratory
for Aging Research



Massachusetts AI & Technology Center for Connected Care in Aging &
Alzheimer's Disease



Penn Artificial Intelligence and Technology Collaboratory
for Healthy Aging



Artificial Intelligence and Technology Collaboratories for Aging Research Coordinating Center



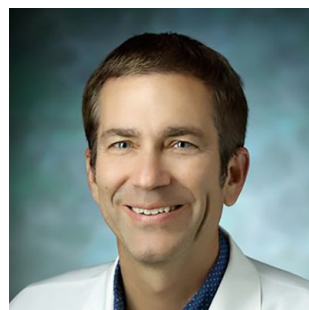
PRINCIPAL INVESTIGATORS



Rama Chellappa



Peter Abadir



Jeremy Walston



Alexis Battle



George Demiris



Jason Karlawish



Jason H. Moore



Deepak Ganesan



Niteesh Choudhry



Rose Li



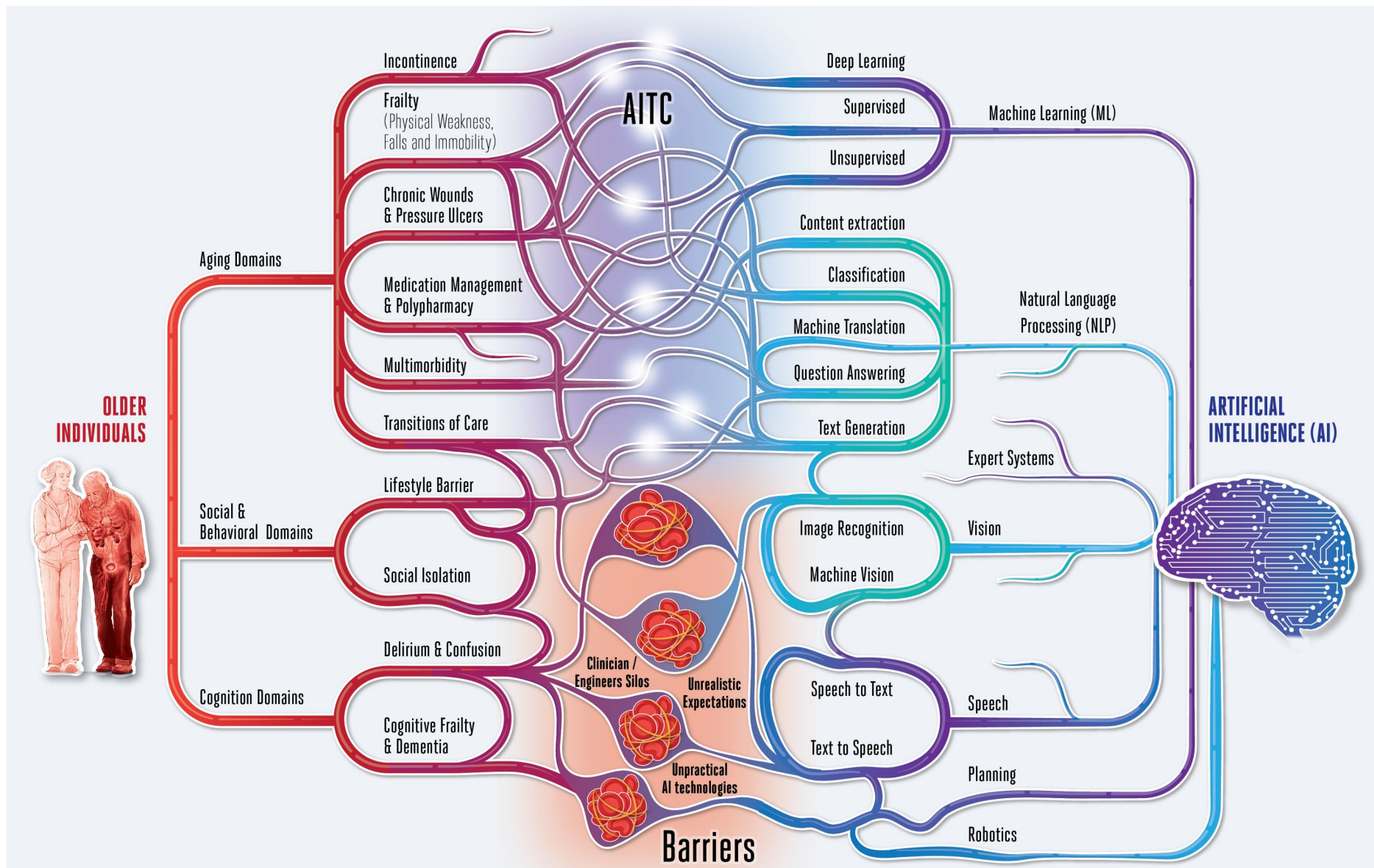
Use of Tech and AI in Healthcare in the News

- ***AI could help doctors make better diagnosis, by Craig LeMout, 10.25.23*** [AI could help doctors stay up to date with diagnoses : Shots - Health News : NPR](#)
- ***Why doctors should get to know AI as well as they know their spouses, Guest commentary-by Katherine Goodman and Daniel Morgan-10.30.23*** [Why doctors should get to know AI as well as they know their spouses | GUEST COMMENTARY \(baltimoresun.com\)](#)
- ***Doctors Wrestle With A.I. in Patient Care, Citing Lax Oversight-by Christina Jewett-*** <https://www.nytimes.com/2023/10/30/health/doctors-ai-technology-health-care.html> ***New York Times, 10.30.23***

Use of Tech and AI in Healthcare in the News

- ***President Biden Issues Executive Order on Safe, Secure, and Trustworthy AI, October 30, 2023-FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence | The White House***
- ***AI tools are keeping hospital patients alive-by Leana S. Wen, 11.7.23-Opinion | AI tools are keeping hospital patients alive - The Washington Post***

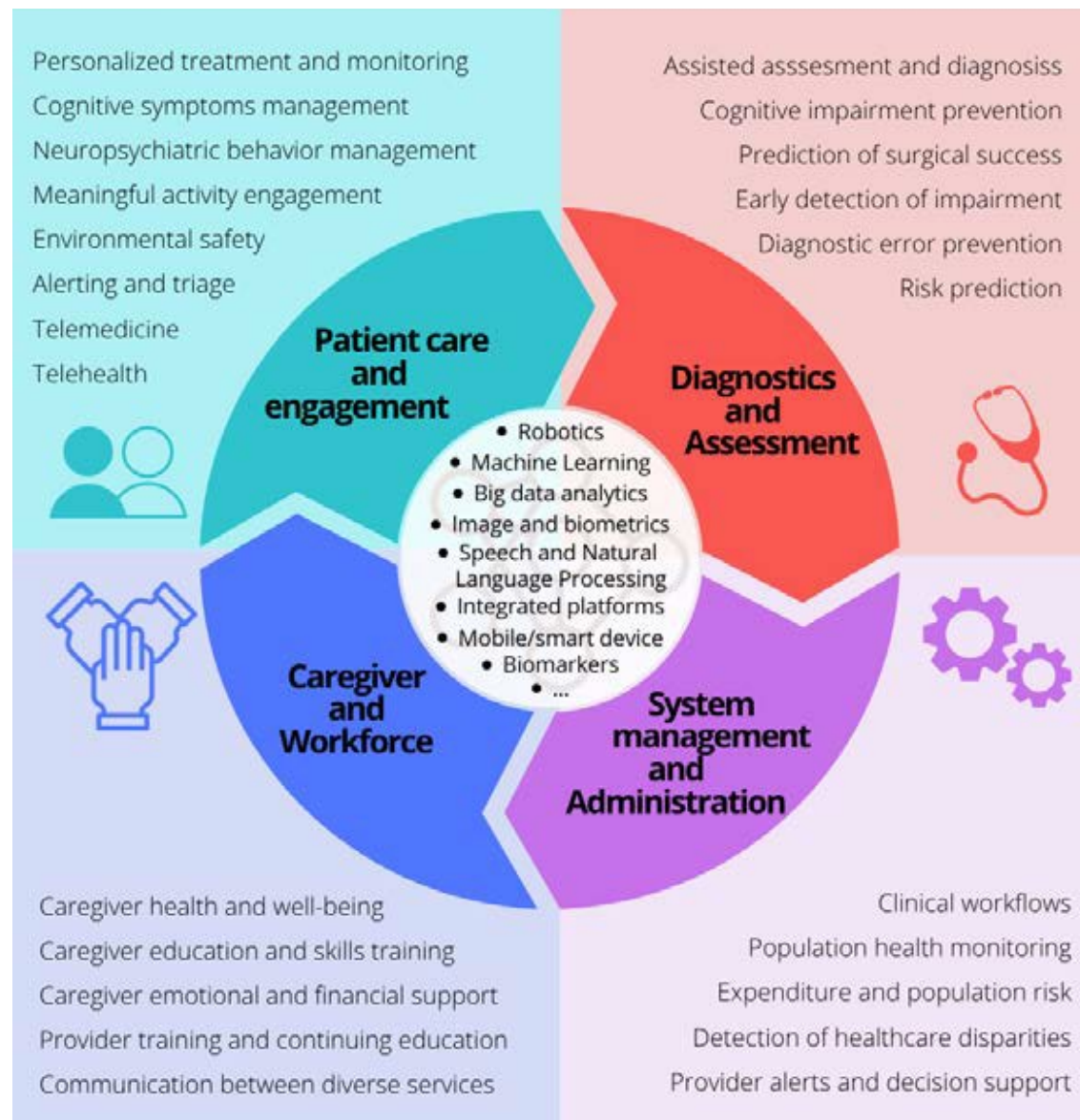
JH AITC: Facilitating Independence and Resilience in Older Adults

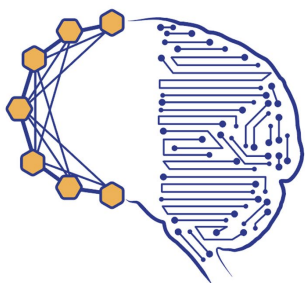




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Technology Collaboratory
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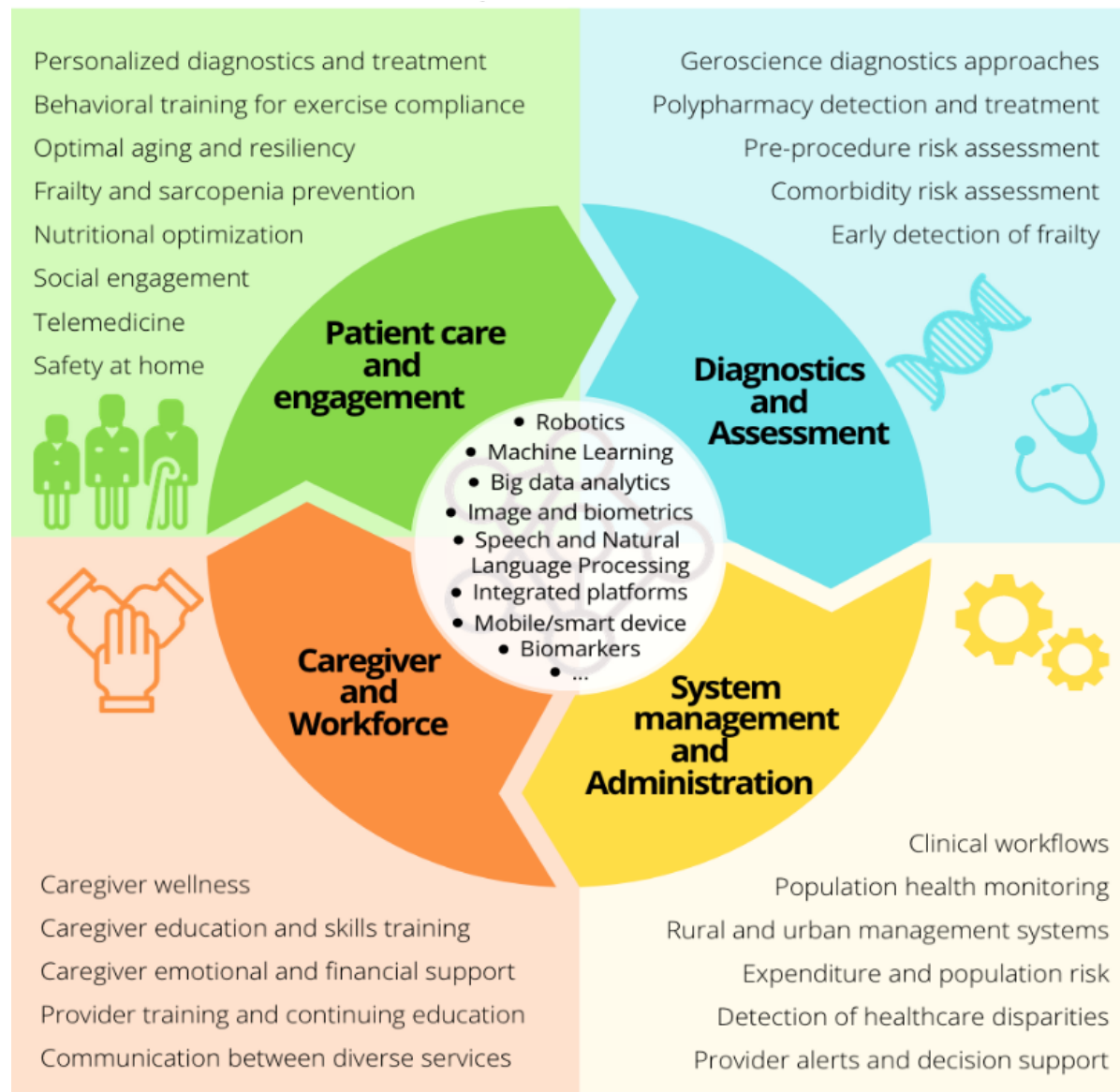
AI for Alzheimer's Disease and Related Dementias





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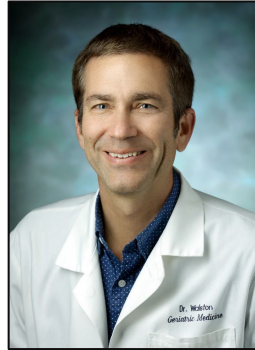
AI and Technology to Maintain Independence in Older Adults



The JH AITC Leadership Team



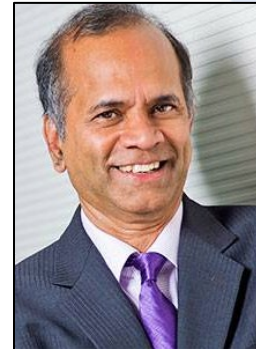
Peter M. Abadir, M.D.
Associate Professor of Medicine
Division of Geriatric Medicine
and Gerontology



Jeremy D. Walston, M.D.
Raymond and Anna Lublin Professor
of Geriatric Medicine
Deputy Director of the Division of
Geriatric Medicine and Gerontology



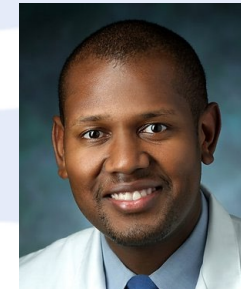
Alexis Battle, PhD
Director, Malone Center for
Engineering in Healthcare
Associate Professor of Biomedical
Engineering & Computer Science



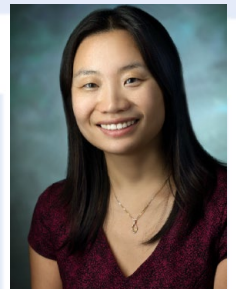
Rama Chellappa
Bloomberg Distinguished Professor
Department of Electrical and
Computer Engineering



Christopher Chute,
M.D., Ph.D.
Data Integration and
Quality Core



Thomas Cudjoe, MD
Stakeholder Core



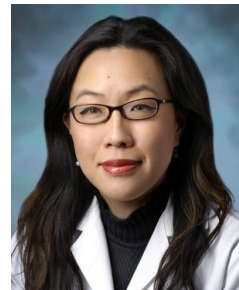
Nancy Schoenborn, MD, MH
Stakeholder Core



Najim Dehak, Ph.D.
Pilot A (AD/ADRC)



Quincy Samus, PhD
Pilot A (AD/ADRD)



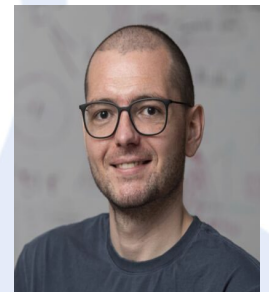
Esther Oh, MD, Ph.D.
Pilot A (AD/ADRD)



Suchi Saria, Ph.D.
Pilot B (Geriatrics)



Alicia Arbaje, M.D., Ph.D.
Technology Identification Core



Mathias Unberath, PhD
Technology Identification Core

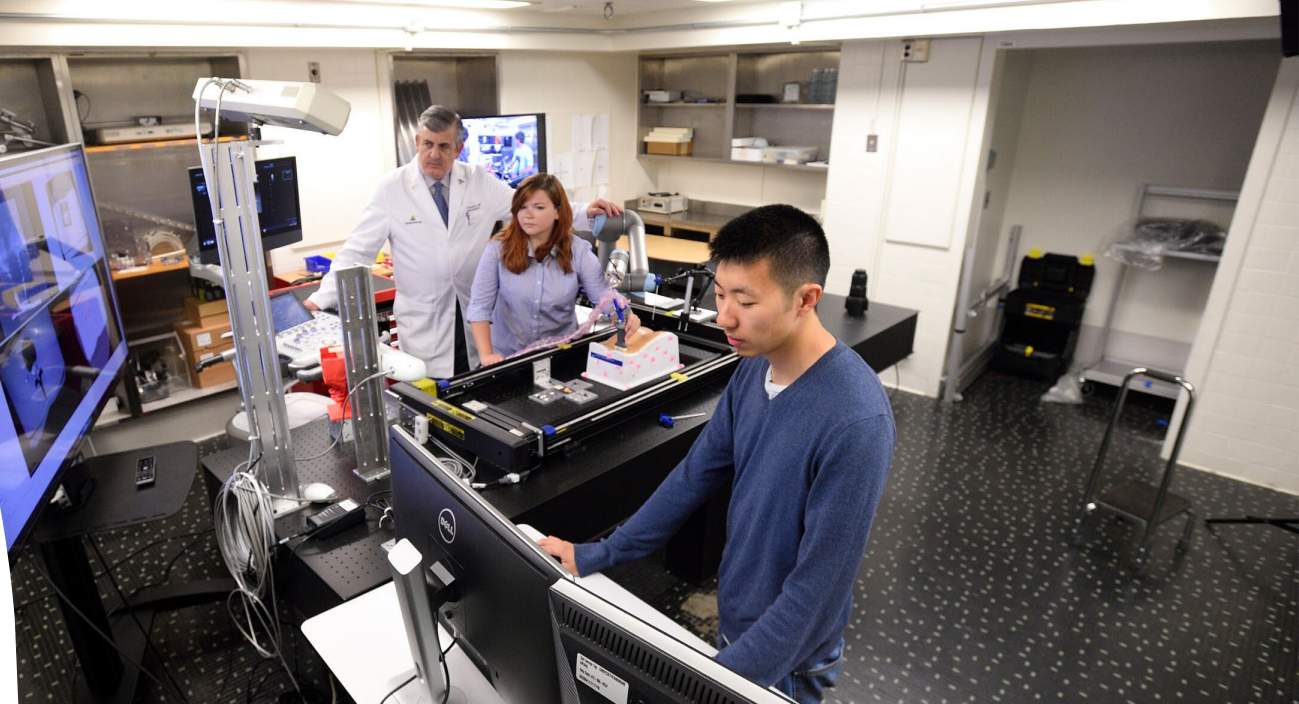
AITC CORES

Cores	JH AITC	MassAITC	PennAITech
Administrative	•	•	•
Pilot (AD/ADRD)	•	•	•
Pilot (Aging)	•	•	•
Clinical Translation and Validation	•	•	•
Technology Identification and Training	•	•	•
Stakeholder Engagement	•	•	•
Networking and Mentoring	•	•	•
Data Integration and Quality	•		
Ethics and Policy			•



JH AITC- Clinical Research Resources

- Access to Older adults in urban and rural communities
 - Network in Rural Iowa
 - Network Through VAMC in Rural Midwest
 - Network Through JH SPH programs



JH AITC-Business and Networking Opportunities



- Access to Carey Business School for brainstorming and grant development feedback exercises, idea launchpad events, and venture financing pitches
- Access to business development consulting resources and market research support through the Carey Business School
- Networking opportunities with business and venture capital leaders that will help to facilitate product development

JHU Engineering Laboratories

- Laboratory for Computational Sensing + Robotics
 - Haptics and medical robotics lab
 - Locomotion in mechanical and biological systems
 - Computational interaction and robotics lab
 - Intuitive computing laboratory
 - Advanced medical instrumentation, and robotics
 - Computational sensory-motor systems lab
- Center for language and speech processing
 - Use of speech and language technology and gait for detection, monitoring of dementia, Parkinson's and other conditions
- AI for Engineering and Medicine lab
 - Computer vision and machine learning algorithms for gait analysis, facial expression analysis, transfer learning, fair and robust AI.

a2 PILOT AWARDS

- \$40M over 5 years to fund the a2 Pilot Awards through national pilot project competition hosted by the a2 Collective.
- The a2 Pilot Awards fund promising AI and technology pilot projects that seek to improve the care and health outcomes for older Americans, including persons with Alzheimer's disease and related dementias (AD/ ADRD), and their caregivers. Pilot projects should have a minimum viable product or prototype ready to deploy into a demonstration study as well as a clear path to commercialization, translational milestones, or technology transfer.
- Applicants can request up to \$200,000 in non-dilutive direct costs to be expended within a 12-month period. Multi-year commitments and time extensions may be selectively granted on a case-by-case basis by the awarding AITC.
- Applicant institutions can be any fiscally responsible organization with a Unique Entity ID within the United States, which includes for-profit organizations, higher education institutions, other nonprofits, eligible agencies of the federal government, local government entities, and other organizations.

a² PILOT AWARDS

Selected Awardee Institutions and Organizations – Cohort 1

a2collective.ai/awardees

JOHNS HOPKINS AI & TECHNOLOGY COLLABORATORY for AGING RESEARCH JH AITC

Massachusetts AI & Technology Center for Connected Care in Aging & Alzheimer's Disease MassAITC

PennAITech

Next Pilot Round Launches March 1, 2024

FOURTH ANNUAL



JOHNS HOPKINS
AI & TECHNOLOGY
COLLABORATORY
for AGING RESEARCH

MassAITC

PennAITech

NON-DILUTIVE FUNDING FOR
AI / TECH + AGING
including Alzheimer's disease and related dementias

The a2 Pilot Awards are funded by the National Institute on Aging,
part of the National Institutes of Health.

APPLICATION PERIOD:
3.1.2024 - 4.30.2024 *5PM ET

www.a2pilotawards.ai

Round 1 Applications Open:	Mar 1, 2024
Q&A Webinar with AITC Leadership:	TBD
Round 1 Applications Deadline:	Apr 30, 2024, 5 p.m. ET
Round 2 (Invite-Only) Applications Deadline:	Jul 30, 2024, 5 p.m. ET
Formal Awards Anticipated:	Fall 2024