The Hartford Center for Mature Market Excellence® and the MIT AgeLab conducted research to better understand which smart home technologies may make life easier, help with home maintenance, and enhance safety and security for homeowners over the age of 50. Our research involved an extensive review of new smart home technologies by leading experts in housing, aging and technology from the fields of occupational therapy, interior design, computer science, gerontology, and engineering.

### Majd Alwan, Ph.D.
Senior Vice President of Technology, LeadingAge, Executive Director of the LeadingAge Center for Aging Services Technologies (CAST)

Majd Alwan currently serves as LeadingAge’s senior vice president of technology, and executive director of the LeadingAge Center for Aging Services Technologies (CAST). In these positions, Dr. Alwan is responsible for creating and leading a network of technology companies, providers and research institutions focused on technology solutions for an aging society. Dr. Alwan received his Ph.D. from University of London, a Master of Science degree from Bradford University, and a bachelor’s degree from Damascus University. He is a senior member of the Institute of Electrical and Electronics Engineers (IEEE).

### Fred Barez, Ph.D.
Professor of Mechanical Engineering at San Jose State University

Fred Barez is a professor of mechanical engineering at San Jose State University (SJSU). His research involves smart vehicles, advanced transportation, cyber security, smart homes and energy efficiency. Dr. Barez is director of the Smart Home and Energy Efficiency Laboratory in support of the application of smart devices in home energy management, home safety, and occupant comfort. Dr. Barez is a member and Fellow of the American Society of Mechanical Engineers (ASME), a member of the Society of Automotive Engineers (SAE), and IEEE.
Esther Greenhouse  
Environmental Gerontologist and Designer  

Esther Greenhouse is an environmental gerontologist and designer who has consulted on regional PBS series, senior living communities, and the nation’s first elder-focused emergency department. She serves as a catalyst for change working with municipalities and is an Industry Scholar for the Cornell Institute for Healthy Futures. A recognized national expert in both universal design and aging in place, Ms. Greenhouse’s goal is create environments of all scales which enable people to thrive.

Carl K. Chang, Ph.D.  
Professor of Computer Science, Professor of Human-Computer Interaction and Director of Software Engineering Laboratory and Smart Home Laboratory at Iowa State University  

Carl K. Chang is a professor of computer science, professor of Human-Computer Interaction and director of Software Engineering Laboratory and Smart Home Laboratory at Iowa State University. His research interests include requirements engineering, services and cloud computing, situational software engineering, smart technologies and successful aging. Dr. Chang received a Ph.D. from Northwestern University. He is an IEEE and AAAS Fellow, and a member of the European Academy of Sciences.

Aaron Crandall, Ph.D.  
Assistant Research Professor of Computer Science at Washington State University  

Aaron Crandall is an assistant research professor of computer science at Washington State University. He is founder and CEO of BehavioMetrics, a company focused on technologies to support healthy aging in place for our community’s older adults. Dr. Crandall’s academic efforts include researching artificial intelligence to model behavior of people in smart environments as well as addressing user needs with senior care focused technologies. Dr. Crandall received his Ph.D. from Washington State University, his master’s degree from Oregon Health and Science University, and his bachelor’s degree from the University of Portland.

Brian Jones  
Senior Research Engineer at the Interactive Media Technology Center at Georgia Tech  

Brian Jones is a senior research engineer at the Interactive Media Technology Center at Georgia Tech. His primary research interests focus on the design and development of technologies to improve health and well-being and enable healthy aging and increased independence. Mr. Jones currently oversees the Aware Home Living Lab, a facility on campus designed to provide an authentic home environment and supporting technology infrastructure for Georgia Tech faculty and students interested in researching a variety of applications in the home.
Jon Pynoos, Ph.D.
UPS Foundation Professor of Gerontology, Policy and Planning at the Andrus Gerontology Center of the University of Southern California

Jon Pynoos is the UPS Foundation professor of Gerontology, Policy and Planning at the Andrus Gerontology Center of the University of Southern California. He is also director of the National Resource Center on Supportive Housing and Home Modification, and has been co-director of the Fall Prevention Center of Excellence. He has written/edited six books on housing and older adults. Dr. Pynoos has spent his career researching, writing, and advising the government and non-profit sectors on how to improve housing and long term care for older adults. He has conducted a large number of applied research projects on housing, aging in place and long-term care. He holds undergraduate, master’s and Ph.D. degrees from Harvard University.

Scott Schaeperkoetter
Director of Operations, R.I.S.E. Program

Scott Schaeperkoetter is the owner and operator of a design build construction company. In 2013, he joined the Gary Sinise Foundation as a senior project manager, overseeing the planning, design and completion of 12 homes. In 2015, he transitioned to Director of Operations for the Foundation’s R.I.S.E. Program (Restoring Independence, Supporting Empowerment). This program provides specially adapted smart homes, home modifications, mobility devices, and adapted vehicles to America’s most severely wounded war heroes and their families. Mr. Schaeperkoetter graduated from the University of Missouri – Columbia with a degree in Business Management.

Scott A. Trudeau, Ph.D., OTR/L
Productive Aging and Interprofessional Collaborative Practice Program Manager, American Occupational Therapy Association

Dr. Trudeau has spent over thirty years as an occupational therapist working with adults with a variety of physical, neurological and emotional issues. His research interests center around factors contributing to successful aging and issues of adaptation for older adults with chronic illnesses like Alzheimer’s disease. Dr. Trudeau’s current work explores topics of home safety, personal care, the dynamics of care giving, and the role of lifelong learning for community dwelling older adults. Dr. Trudeau earned a Bachelor of Science and an Advanced Professional Master of Arts from Tufts University, and a Doctor of Philosophy from Boston College.

For more information on the Top Smart Home Technologies, visit: thehartford.com/lifetime and follow us at: www.twitter.com/thehartfordcmme.