

## **RAI Article: “Nana Technology” Becomes New Multi-Billion Dollar Growth Industry in the US – Award Program Established in US for Best New Technologies for the Elderly.**

*Author: Rapid Access International, Inc. January, 2014*

With the growth in the number of baby boomers globally, researchers at universities and think tanks around the US are working hard on new technologies to support the growing aging population. A researcher at George Mason University in Fairfax, Virginia -- Andrew Carle, assistant professor in the College of Health and Human Services and director of its **assisted living program** -- has given a name to the multibillion dollar industry (starting in 2004) and is calling this growing trend in global business “Nana Technology.” (“Nana” in the US is a term used for grandmothers in colloquial language). George Mason University has a specialized assisted living program, which is part of the Department of Health Administration and Policy at the university.

### **New Award Program Established**

The university department recently signed an agreement with the Mature Market Resource Center (MMRC) to set up a new system of awards to be given annually to the best technologies in the area of elderly care and technology. The Mature Market Resource Center is an organization that sponsors awards for technologies and services focused on elderly care. The MMRC is a national information clearinghouse for older adult programs. In addition to the National Mature Media Awards. Other well-known MMRC programs include: National Senior Health & Fitness Day and the Mature Fitness Awards USA.

Additional information on MMRC programs and services and other useful senior market information can be found on their website at: [www.seniorprograms.com](http://www.seniorprograms.com)

The “Nana” technology awards will be part of a national competition recognizing the best new products and technologies for the elderly. The first “Nanas” are scheduled to be presented in 2014.

### **Origin and Definition of Nana Technology**

Professor Carle specifically defines “Nana” technology as “technology designed, intended or that can otherwise be used to improve quality of life for the elderly.” Professor Carle further defines five categories for the technologies that are being produced or developed by companies including Intel, GE, Philips and Kimberly-Clark, among many other players entering this lucrative market:

- Health products, these include medication dispensers and technologies that are designed to reduce errors or mistakes by the elderly
- Safety products, such as bracelets or shoes worn by the elderly to track their movements and location
- Cognition or memory products, these include computer software programs that regularly test and evaluate elderly residents or patients and send the data to a medical facility or health care professional or family member for review
- Lifestyle products that provide a convenience factor for the elderly and improve their day to day lifestyles. One of the ideas promoted by Professor Carle is a mailbox that uses sensors to alert the user that mail has been delivered to their home or residence
- Products for the "whole house" that provide overall home monitoring and management (such as the use of sensors placed throughout the bedroom or in appliances to measure how products are being used or the movement of the elderly person throughout the house. "This technology has the potential to serve the entire elderly population, whether living independently or in a community," Professor Carle mentioned. "The applications are endless, and we will continue to see the development of products designed to serve the industry

Carle has more than 20 years of senior housing and health care management experience, including previous service as one of the first operations executives and vice president of business services for a national provider of assisted living services. Professor Carle was also one of 15 executives nationally to be named to the Expert Panel on Assisted Living of the Joint Commission on Accreditation of Healthcare Organizations, which developed the first national standards for the assisted living industry.

Professor Carle has served as a consultant or adviser to a number of companies with an interest in developing technologies for older adults, including APPLE, Nintendo, Vigorous Mind, and GTX Corporation. With GTX, he helped develop the first GPS shoe for individuals with Alzheimer's and related dementia, who may be at risk of wandering and becoming lost. In 2012, the technology was recognized as one of the "100 Most Important Inventions of Mankind" by the National Museum of Science and Technology in Stockholm, Sweden.

Some of the new products developed by Professor Carle in coordination with various companies around the world include:

- **Navistar GPS Shoe.** This is a shoe for individuals or elderly persons with Alzheimer's who wander and become lost. The shoe includes the ability to program a safety "geo-zone",

outside of which identified family members or caregivers will receive automatic email or text alerts, and they are provided a satellite map location of the wearer.

- **Philips Medication Dispensing System.** This is a table top dispenser (that looks like a US bubble gum machine) that releases pills at pre-programmed times, while providing audio and visual reminders. If pills are not taken within a specific time, the machine will telephone or contact up to five family members, friends, or a professional call center to report the missed dosage.
- **Large Dial Cell Phone.** Designed with simple to see and use features, including oversized buttons, increased screen size and brightness, and a cushioned ear rest for comfort.
- **GrandCare Systems.** This is the "whole house" system described in this report. This is a sensor based system that remotely monitors motion and related activity throughout the home, and provides alerts for activity detected as unusual or dangerous (such as leaving the oven or stove on for too long). The system additionally provides telecommunication capabilities.

Sources:

Interview with staff of Professor Andrew Carle by RAI (January 29, 2014)

[www.seniorprograms.com](http://www.seniorprograms.com)

[http://usatoday30.usatoday.com/tech/graphics/nana\\_tech/01.htm](http://usatoday30.usatoday.com/tech/graphics/nana_tech/01.htm)

[http://en.wikipedia.org/wiki/Nana\\_technology](http://en.wikipedia.org/wiki/Nana_technology)

<http://chhs.gmu.edu/faculty-and-staff/carle.cfm>