

THE JOURNAL ON **ACTIVE**AGING®

November/December 2011, Vol. 10 No. 6

The research issue

The brain-body connection

How exercise affects the aging brain

Exploring sarcopenia

What it is (and is not) and how to deal with it

Platforms & protocols

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The Journal on Active Aging®
November/December 2011, Vol. 10 No. 6

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C O N T

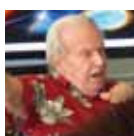
The research issue

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RESEARCH Exercise and the aging brain pg. 20

This article explores the impact of exercise on the aging brain—and affirms the message that “what is good for the body, is good for the brain.” *By Terry Eckmann, PhD*



INDUSTRY DEVELOPMENT ICAA Champions in action: initiative gains momentum, makes inroads across North America pg. 30

Organizations and individuals demonstrate the vibrant power of active aging. *By Marilyn Larkin, MA*



HEALTH CONDITIONS Sarcopenia: what it is (and is not) and how to deal with it pg. 54

Sarcopenia is a significant health issue in the older-adult population, especially as people advance in years. Interventions can help mitigate losses associated with this condition. *By Alexandra Williams, MA*

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RESEARCH REVIEW **Whole body vibration, part two: what's the most effective protocol? pg. 66**

Discover what the scientific literature shows about the effectiveness of different whole-body vibration platforms and protocols on specific physical performance measures for aging well. *By Joseph Signorile, PhD*

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This end-of-year report highlights some of the International Council on Active Aging's activities over the last 12 months.



ICAA @ 10 **ICAA's top 10 articles on communication pg. 42**

Seeking insight into communication-related topics? Explore these 10 articles published previously in the *Journal on Active Aging*® and *Functional U*®.



ICAA INNOVATORS **The Summit at Central Park: an innovative facility engages active adults in wellness pg. 44**

The City of Grand Prairie, Texas, reconceptualizes the senior center, opening a "country club-level" venue for adults ages 50-plus.



ICAA INNOVATORS **ICAA honors eight innovative efforts that advance active aging pg. 60**

Cutting-edge programs, products and environments support healthier, more vital living for people ages 50 and beyond—and send an important message.



SOAPBOX **Ageism hides in plain sight pg. 74**

In a society that still accepts ageism, denial takes many forms. It's time to challenge this damaging bias against older adults and signal "the beginning of the end" for ageist practices. *By Kathy Sporre, CSA*



ICAA INNOVATORS **Valle Verde commits to better the world with its Green Footprint program pg. 78**

A progressive community for active, engaged older adults strives to be "a model, sustainable community" through its green initiative.

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THE ICAA PHILOSOPHY

Changing the way we age®

We can change the way we age by staying active, to the fullest extent possible, within all areas of life: physical, spiritual, emotional, intellectual, professional, social and environmental. Aging within these dimensions of wellness keeps us involved, alert and enjoying a productive life.

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Age-friendly

ICAA's age-friendly philosophy designates programs that provide the information, access and motivation people need to become and stay active through all levels of functional ability.



COMMENT

A deer in headlights

For the last 10 years, businesses, media outlets, and individuals have asked me the same question: “How is society responding to population aging?” My response is always the same. “Not well.” That answer has always bothered me, as it does not tell the story the way it needs to be told. So here is a better one: So far, society is like the proverbial deer caught in the headlights of a speeding car—frozen in place and unable to get out of the way, even though it knows it’s in trouble.

Over the last few decades, many of us have repeatedly heard the “Pig in the Python” analogy of the Boomers moving through the life course. This analogy has been beaten to death, yet governments, businesses, healthcare, communities, families and individuals have barely budged in response. Just like the deer in the headlights. Let me share a few numbers to support this view:

- Only 17% of cities have an official strategic plan in place for addressing the issues and opportunities presented by Boomers and their parents.
- Only 30% of Fortune 500 CEOs have plans in place for the Boomer market.
- An estimated 95% of all marketing dollars are spent on the under-35 age group, even though the age 65-plus market has 47 times more wealth than the younger population.
- Healthcare is still not designed to address multiple chronic-health conditions, yet 50% of age 65-plus Americans have two or more such conditions. Health professionals also lack

the training to address these issues effectively.

- Families and individuals are ill-prepared for growing old, whether the focus is health maintenance or financial stability. For example, 76% of Boomers say they will work into their late 70s, yet 40% of those in this group who retired early did so due to health issues.

The real question is, How do we change this picture? As it is for the deer in the highlights, the logical answer for us is to take action. We need to shift our paradigms and thinking when it comes to population aging.

The active-aging industry is one of the few that has acted, yet our challenge as professionals is to become even greater advocates for the older population. Why? Because there are few of us in society pushing for change. To truly have an impact on the way cities are built, healthcare is designed, businesses and marketers address customers, and families and individuals prepare for old age, we must pick up the mantle. We need to advocate for our residents, members, clients or customers, as well as our aging staff, our families and ourselves. It is *our* future we are creating together.

Here are some examples of the kind of societal responses needed:

- Governments need to create and support policies, funding and tax breaks for organizations, communities and

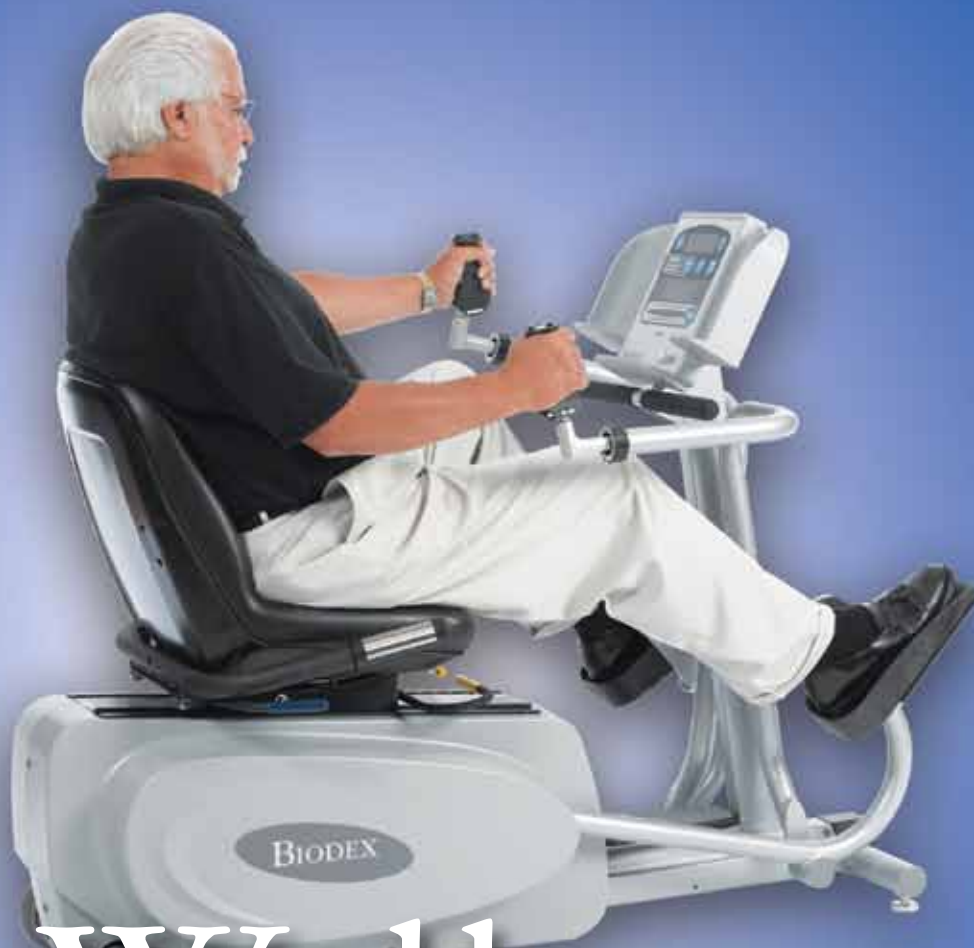
businesses that create and deliver active-aging programs.

- Businesses need to train, retrain and retain more of their workforce by offering active-aging programs for workers.
- Communities need to provide settings and supportive organizations to deliver active-aging opportunities and environments.
- Families need to prepare for their loved ones’ aging by becoming more informed about issues and taking steps in advance to support their quality of life in later years.
- Individuals need to decide if they want to embrace a lifestyle that achieves quality of life by living as fully as possible throughout the life span.

So, how will you address population aging?🌀

Colin Milner, CEO
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Developers and elected officials took part in a groundbreaking ceremony for The Terraces of Bonita Springs, Florida, in November. Photo: Garth Francis. Image courtesy of The Terraces of Bonita Springs

Construction starts on Florida community

With more than 80% of its residences reserved, The Terraces at Bonita Springs, Florida, has obtained bond financing to begin construction on its new US\$70-million senior living community. The Terraces will be located between Naples and Fort Myers on approximately 20 acres off the South Tamiami Trail, near Bonita Bay Club and Highland Woods Golf and Country Club. To celebrate the start of construction, the community hosted a recent groundbreaking. This event included an on-site ceremony for developers and elected officials, followed by a reception for future residents, local dignitaries and invited guests.

Once complete, The Terraces will include amenities such as fine dining, a bistro, a sky lounge with rooftop views, a performance center auditorium and a creative arts studio. The community, sponsored by Santa Fe Senior Living, will also feature a spa and a fitness center, offering group fitness classes, wellness programs, and indoor and outdoor pools.

Public-private partnership brings affordable apartments to older Angelenos

In Los Angeles, California, a grand opening took place in October for the Dana Strand Senior Apartments, a development by ROEM Corporation and La Cienega LOMOD, Inc., in collaboration with the Housing Authority of the City of Los Angeles. This represents the third redevelopment phase of Dana Strand Village, a former public housing site.

The new Dana Strand, designed by architectural firm KTGy Group, Inc., provides 100 affordable, one-bedroom apartments for older adults with annual incomes at or below 30% of the Los Angeles County area median income. Amenities include a computer center, a community room and energy-efficient appliances, along with services such as resident events, computer programs and English as a Second Language (ESL) classes.

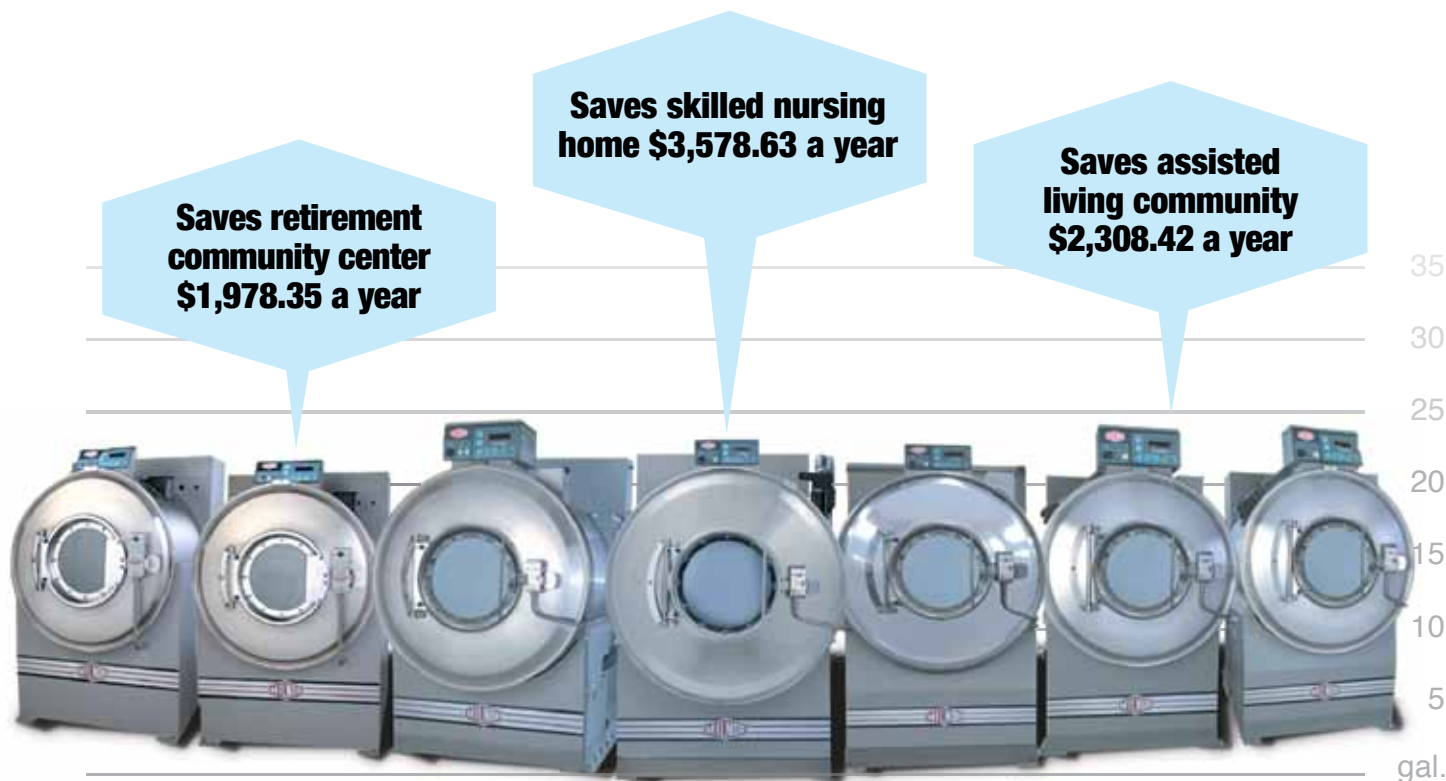
The environmentally-sensitive Dana Strand development transformed the underutilized infill site into a residential

community. The project is constructed using sustainable building methods and also incorporates a number of “green” features designed to ensure its long-term energy-efficiency and sustainability. To this end, Dana Strand is designed to the US Green Building Council’s LEED (Leadership in Energy and Environmental Design) Silver specification, which are industry guidelines for sustainable building and maintenance.

SAGE creates first LGBT seniors center in US

New York City Mayor Michael Bloomberg and the New York City Department for the Aging announced in October that Services & Advocacy for GLBT Elders (SAGE) was awarded an Innovative Senior Center contract to open the first full-time center for lesbian, gay, bisexual and transgender (LGBT) older adults in the United States. The SAGE Center, slated to open in January 2012, will include program sites in all five New York City boroughs, bringing an array of services and support to LGBT elders

Continued on page 10



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The *Journal on Active Aging*® welcomes your news submissions. Please send press releases to publications@icaa.cc—the *Journal*'s email for submissions—and staff will consider your news for possible publication. Newsworthy topics include such things as facility openings; initiative or campaign launches; announcements of awards, promotions or grants; and other topics of interest to active-aging professionals.

throughout the city. The new center's offerings will include hot meals, programs covering issues from health and wellness to workplace skills, social services, and a wide range of social activities.

New York City's Innovative Senior Center program is a new initiative by Bloomberg that gives 10 of the city's aging organizations the opportunity to better serve their communities with creative, needs-based programming that will create models for the seniors center "of the future." The SAGE Center is one of two citywide centers created to address the needs of historically underserved older-adult populations.



Volunteer instructors work with students in the OASIS Institute's Connections program. Image courtesy of the OASIS Institute

Grant enables OASIS to expand program

The OASIS Institute, headquartered in St. Louis, Missouri, has received a

US\$625,000 contribution from communications giant AT&T to expand its Connections technology training program. AT&T's contribution will enable the national education organization to expand workforce skills training for adults ages 50-plus; support national instructor training, e-learning and certification; and equip thousands of adults with the ability to use technology effectively, both in their personal lives and on the job. The expansion includes training in 18 cities across the United States.

The Connections curriculum of 34 courses includes basic computer skills; Internet and email; workplace applications such as Word, Excel and PowerPoint; online applications and resumes; social networking; and practical topics like finding reliable health information. In the past 10 years, more than 46,000 people have enrolled the program.

Settlement brings reprieve for Adult Day Health Care centers in California

A lawsuit against the state of California brought by Disabilities Rights California on behalf of older adults, chronically ill individuals and people with disabilities was settled on November 17, 2011, in favor of the plaintiffs. The settlement brought "immense relief" and "joy" to the thousands of individuals who would have lost services, says Lydia Missaelides, executive director of the California Association for Adult Day Services, in Sacramento. Nearly 300 Adult Day Health Care Centers statewide had been slated to close on December 1.

"Throughout this entire year, 35,000 low-income, medically needy patients and their families have endured incredible stress and lived in fear that they would no longer be able to access care at their local Adult Day Health Care center," Missaelides continues. "This settlement makes it clear that the services provided by center-based adult day health programs are irreplaceable in pre-

venting or reducing use of higher-cost institutional services such as nursing homes and hospital emergency rooms, and honors patient dignity and the Americans with Disabilities Act."



(At center) Chet Surmaczewicz, executive director and president of Santa Marta, and associates celebrate the community's receipt of Holleran awards in three categories. Image courtesy of Santa Marta

Santa Marta recognized as 'best of the best'

Santa Marta, a community in Olanthe, Kansas sponsored by the Archdiocese of Kansas City, was recognized as a "best of the best" among 272 senior living communities in 34 states recently. Communities that scored in the 90th percentile in a resident satisfaction survey received a Highest Honors Award from Holleran, an independent research company specializing in senior service communities. Santa Marta was recognized for excellence in three categories: First Impressions, Employee Satisfaction, and Overall Hospitality Program.

Holiday Retirement communities raise funds to help Canadian veterans

Holiday Retirement's 34 Canadian communities are aiming to raise at least CDN\$100,000 for the Outward Bound Canada Veterans Program, in order to help more than 30 returning service members and recent veterans participate in the program. Outward Bound provides wilderness courses that are physically, mentally and emotionally challenging in an effort to rebuild the self-confidence, pride, trust and com-

munication skills that can help veterans reengage with their families, employers and communities.


Participating Holiday communities, among others, include the Victorian at McKenzie in Victoria, which hosted the unveiling of its veterans Wall of Honor in November; Longlake Chateau in Nanaimo; Okanagan Chateau in Kelowna; and Prince George Chateau in Prince George—all in British Columbia. The communities are holding two-month fundraising campaigns, and Holiday Retirement has pledged to match every dollar donated.

Henry Ford Health System to develop seniors housing

American House Senior Living Communities, REDICO and Henry Ford Health System have signed a letter-of-intent for a proposed plan that could lead to developing seniors housing on the Henry Ford Medical Center-Cottage campus at Grosse Pointe Farms, Michigan. At Henry Ford Medical Center-Cottage, American House would offer the following living options:

- one- and two-bedroom private apartment and studio units for independent older adults;
- one- and two-bedroom private apartment and studio units for older adults who require assistance with daily living activities; and
- one-bedroom apartment and studio units for older adults with Alzheimer's disease and other memory-related conditions.

Residents would have access to medical services at Henry Ford Medical Center-Cottage and across the street at Henry Ford Medical Center-Pierson. Shops, restaurants, accessible public parking and a public library are within walking distance.

If finalized, this would be the first time American House has developed seniors housing in an existing healthcare facility. Due diligence is expected to be completed within the next few months. If a decision is made to proceed, an agreement could be finalized next spring. 

Continued on page 12

Moves and more



Eskaton's Stuart Greenbaum received LeadingAge's Public Trust Award. Image courtesy of Eskaton

Gil Acevedo, former deputy commissioner of Veterans Health Care at the Minnesota Department of Veterans Affairs, has been named senior vice president of operations at Ecumen, a senior housing provider headquartered in the Twin Cities ... **Richard Birkel**, PhD, who served as chief executive of the Rosalynn Carter Institute and held the Pope Distinguished Chair in Caregiving at Georgia Southwestern State University, is now vice president and director of the Self-Care Management Alliance at the National Council on Aging (NCOA) in Washington, DC ... NCOA has also selected **Brian Hofland**, PhD, previously director of International Aging Programs at the Atlantic Philanthropies, as its director of strategic collaboration ... LeadingAge recently presented its Public Trust Award for 2011 to **Stuart Greenbaum**, vice president of public relations and brand management for Eskaton, provider of community living and home support in Northern California ... New York-based Jewish Home Lifecare has promoted **Marie Rosenthal** to the newly created position of vice president, Acute Care Services, and **Margaret Fernandes** to director of nursing, Manhattan campus ... **Arnold Eppel**, most recently executive director of Atrium Village in Owings Mills, Maryland, and former director of the Baltimore County Department of Aging, is now executive director of Baltimore's Edward A. Myerberg Center, which serves age 55-

plus adults ... **Fabiana Cheistwer** was promoted to wellness director of both Baptist Homes Society continuing care retirement communities in Pittsburgh, Pennsylvania ... **Carol Woods Retirement Community**, a CCRC in Chapel Hill, North Carolina, recently won a Victor W. Marshall Older Worker Employer Award, for recognizing the valuable contributions of older adults in the workforce ... **Carmen Steiner** joined The Terraces at Skyline life care community in Seattle, Washington, as health services director ... **Tara Schafer** is the new programs coordinator for Willamette Oaks Retirement Community in Eugene, Oregon, replacing **Candy Davis**, whose recently launched company, Primal Rhythms, provides rhythm, drumming and sounding circles ... **Graham P. Espley-Jones**, president of Western Community Housing Inc. in Costa Mesa, California, has been named 2011 "SAGE person of the year" by the 55+ Housing Council, a special interest council of the Building Industry Association of Southern California ... **Terry L. Lawrence** joined New Perspective Senior Living in Eden Prairie, Minnesota, as vice president of health and wellness, a newly created position ... **Kristi Vater** has become the health care administrator at Capitol Lakes CCRC in Madison, Wisconsin, an affiliate of Oregon-based Pacific Retirement Services ... California PEO Home, a not-for-profit senior living provider in Alhambra, recently changed its name to **Navigage** and launched a new brand identity and philosophical direction ... **Jack Ehnes**, CEO of the California State Teachers' Retirement System in West Sacramento, has received the 2011 Employee Benefit Research (EBRE) Lillywhite award, recognizing outstanding lifetime service and contributions to Americans' economic security ... and **Hannah O'Rourke**, in the Faculty of Nursing, University of Alberta, Edmonton, is the recipient of the Vanier Canada Graduate Scholarship, Canada's most prestigious award for doctoral students; O'Rourke researches "knowledge translation as a mechanism to improve well-being and quality of life for older adults with dementia."

Intergenerational program tackles ageist stereotypes

In the United Kingdom, a workshop entitled “Act your Age! Challenging Stereotypes” was held as part of the Economic and Social Research Council’s Festival of Social Science 2011 in November—an event that celebrates the best of British social science research and how it influences social, economic and political life. The intergenerational program was organized by the University of Sheffield’s New Dynamics of Ageing research program and coordinated by Sarah Howson and Charlotte Jones.

“Stereotyping in the media can lead to a negative understanding of older people,” Howson and Jones explain. The “Act your Age!” workshop used “a variety of hands-on activities to help the children to consider their perceptions of older people,” and the youngsters were asked “to apply these ideas to their own lives and develop their self-awareness.” Children also engaged both with older members of their local community and the program’s Older People’s Reference Group to explore and reflect on issues related to aging.

“The topic links in with several sections of the guidelines provided in the Key Stage 2 [ages 7–11 years] curriculum, such as exploring the ways that media present information and the ways that we understand people who are different from ourselves,” says Howson. “In addition, it highlights key areas often neglected in children’s social education. These issues have relevance in children’s everyday interaction with others, as well as their own futures.”

Community interest leads to launch of evidence-based program in Ontario

Canada’s Lawson Health Research Institute in London, Ontario, recently launched a tailored, exercise prescrip-

tion program driven by interest from Huron County residents. After participating in a healthy lifestyle study led by Lawson’s Robert Petrella, MD, PhD, community members expressed a desire to become more active partners in their own healthcare, according to the institute. Through evidence-based research and a series of community consultations, Petrella and his team designed a series of exercise modules called “HealtheSteps” to promote healthy lifestyles. The program will work in partnership with local family health professionals and community partners.

In 2010, Petrella and colleagues took part in an international study to reduce the risks of diabetes and cardiovascular disease. Their project proposed exercise as medicine, using lifestyle changes and self-monitoring to improve health behaviors, personal motivation, and disease-associated risks. Residents of Huron County have higher than average rates of cardiovascular disease, and happily became partners in change. As the study wrapped up, community members advocated to turn the research into reality. The result is HealtheSteps, which will be supported by an interactive website, group coaching and goal setting, personalized exercise prescriptions, and online tracking tools.


AoA funds new center on nutrition and aging

In the United States, Assistant Secretary for Aging Kathy Greenlee recently announced an award of US\$315,667 to the Meals on Wheels Association of America to establish a new National Resource Center on Nutrition and Aging. “Nutrition is an essential ingredient for maintaining health, functionality and continued independence in the community,” states Greenlee. “The [National Resource Center on Nutrition and Aging] will be a new resource to enhance this critical community-based nutrition program targeted at older adults.”

The Older Americans Act nutrition program aims to reduce hunger and food insecurity of older adults as well as promote their socialization, health and well-being. Its purpose is also to delay adverse health conditions through access to nutrition and other disease prevention and health promotion services. The new center will work to assist the Administration on Aging, part of the US Department of Health and Human Services, in meeting the Act’s requirements to build the capacity of the aging services network to provide nutrition services for current and future older-adult populations integrated into home- and community-based service systems, and to provide training and technical assistance regarding nutrition services. It will also work to enhance knowledge of the role of nutrition services in health promotion and disease prevention.

Peace Corps, AARP promote service opportunities for 50+

AARP, the national nonprofit organization serving Americans ages 50 and over, and the Peace Corps, a US government agency dedicated to volunteer service in foreign countries, recently announced a new relationship to encourage more service opportunities in the US and abroad for older adults. Currently, seven percent of volunteers who serve in the Peace Corps are over age 50. And there is no age limit to apply for service.

Through the new agreement with AARP, the Peace Corps will continue to advance the work of its volunteers over age 50 and to encourage AARP members and all people ages 50-plus to consider serving with the agency. The two organizations will also encourage returned Peace Corps volunteers and AARP volunteers to serve together in their communities. One way people can volunteer is through the AARP Create The Good website (www.createthegood.org), where they can connect to ways to make a difference. 



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Thera-Band Hand Xtrainer

Performance Health reveals new Thera-Band hand therapy tool

New from Performance Health, the Thera-Band Hand Xtrainer (pronounced cross-trainer) supports a range of finger, hand, wrist and forearm exercises. The Hand Xtrainer's ability to return to its existing shape allows the user to perform repeated extension and pinch exercises without having to stop to remold the material. Four levels of progressive resistance enable practitioners to customize exercise, while motivating users with visual validation of progress. In addition, the Xtrainer's patented latex-free formula supports both hot and cold therapy. To view videos and learn more about this product line, refer to info.thera-bandacademy.com/xtrainer.

Masterpiece Living data illuminates emotional well-being factors

Analysis of the Masterpiece Living database on aging has revealed insights into emotional well-being, an important aspect of aging. A definition for emotional health was created, and two groups were identified: emotional risk and not-at-risk. Significant differences between the groups existed for overall health, life satisfaction, pain and energy levels. In the emotional risk group, significant correlations were found between loneliness and

life satisfaction, and other parameters, including level of happiness. The correlations suggest that targeting one's perception of loneliness may lead to overall improvement in life satisfaction. Contact Neal Miller at nmiller@mymasterpieceliving.com for information.

Precor adds to senior management team

Tom Hull has joined Precor Incorporated as the vice president of sales—Americas. This hire completes the company's senior management team, filling the role previously held by Chris Torggler, now general manager—Precor Strength. Hull brings to Precor extensive leadership experience in the technology industry and credentials in the fields of sports and health. Most recently, he served as vice president and executive committee member at Attachmate Corporation, provider of enterprise software solutions to the Global 1000. Hull currently is a board member for the YMCA of Greater Seattle, Washington. Precor product details are available at www.precor.com.



The Step360 Pro, by SPRI

SPRI introduces versatile functional training tool

The new Step360 Pro, by SPRI, offers cardiovascular training, strength training, balance and flexibility exercise, and total-body conditioning. A flat, 25" platform that sits atop two independently inflatable air chambers, the Step360 Pro features a nonslip surface for secure jumping and bounding activities. Dynamic or static flexibility exercises are

possible in standing, sitting, kneeling or lying positions. "This flat surface balance trainer ... can be safely used with very diverse populations, and it challenges everyone in three dimensions for valuable functional training," says Greg Niederlander, SPRI's director of product and program development. Learn more at www.spri.com.



Life Fitness's new hybrid logo

Life Fitness technology draws on people power

As part of a pledge to lighten its global footprint, Life Fitness now offers hybrid energy-saving technology that utilizes power generated from user workouts. The hybrid products switch from electric to self-generated power when workouts reach a certain intensity, lowering the energy draw from the console by over 75%. This feature works in the Elevation Series Engage Cross-Trainers and Life-cycle exercise bikes. "Our customers are increasingly interested in green options that will save them money, so we are putting solid investment behind product advancements ...," says Chris Clawson, Life Fitness president. For details, see www.lifefitness.com.

MERIT to manage Oasis community

The Oasis Homeowners Association has selected MERIT Property Management to manage its 1,153 active-adult single-family homes in Menifee, California. Minutes away from Temecula's "Old Town" and the wine country, the Oasis is located next to the Menifee Lakes Country Club, adjacent to a 36-hole Ted Robinson-designed championship golf course. There are over 50 clubs and committees at the gated community. Amenities include a clubhouse with a large

ballroom and kitchen facility, billiard room, library, ping-pong room, craft room, shuffle board and swimming pool, plus more than 300 acres of landscaping. Find out more about MERIT at www.meritpm.com.

COLLAGE enhances tools in assessment suite

COLLAGE, The Art & Science of Healthy Aging, a consortium of aging service organizations working to advance healthy aging and improve outcomes of older adults living independently, recently announced improvements to the COLLAGE assessment suite. New user-friendly query and reporting tools have been incorporated into the suite, and members can now directly “mine” their data at any time. Consortium members explore such issues as individuals who want more fitness options but are challenged with pain while exercising, and those who want help managing stress and/or chronic pain. For further information about COLLAGE, go to <http://collageaging.org>.



Biodex's BioStep 2

Biodex releases new low-impact recumbent stepper

Biodex Medical Systems has added the BioStep 2 Semi-Recumbent Stepper to its product line. The stepper has several age-friendly features, including a step-through frame; a large, easy-to-see and -use display; and a low-impact elliptical motion that does not jar joints. The cross-trainer also provides pivoting handgrips and a seat that rotates to 90° on either side, at a height that can accommodate wheelchair transfers. Other features include sturdy grab handles;

integrated heart-rate monitoring; a large utility holder; and articulating footplates that generate even, sustained muscle contractions. To learn more about BioStep 2, visit www.biodex.com/biostep.



A First Health of the Carolinas' patient uses Technogym solutions

Technogym video shows implementation of software

A new video on Technogym's YouTube channel highlights First Health of the Carolinas' implementation of the Technogym Wellness System software through the Seattle-based company's equipment, in conjunction with the American College of Sports Medicine's "Exercise is Medicine" program. Located in Pinehurst, North Carolina, First Health is a private, not-for-profit healthcare network that serves 15 counties, three hospitals and six fitness centers. The video explains how Technogym's Wellness System and Smartkey enable data collection during workouts to assist First Health's physicians and patients. To view this video, visit www.youtube.com/watch?v=k-lNHjMBuEs&feature=channel_video_title. Check out Technogym online at www.technogymusa.com.

Med-Fit sells directly to US government agencies

Med-Fit Systems, Inc., manufacturer of Nautilus equipment, was recently awarded a GSA [General Services Administration] contract to offer commercial fitness, wellness and rehabilitation products to the United States government. "We are very excited to receive our GSA contract," says Mike Herlihy, Med-Fit's federal government sales director. "Being on a GSA schedule allows us to make our products available directly to federal agencies at very competitive prices." The company anticipates positively impacting quality of life for federal personnel

worldwide, notes Herlihy, and proudly offers "Made in the USA" products. Visit www.medfitsystems.com for Med-Fit information.


Morrison recognized as outstanding workplace

Morrison Management Specialists has been named one of the "Best Places to Work in Healthcare" by *Modern Healthcare* magazine. Created by Best Companies Group and *Modern Healthcare*, this program recognizes outstanding places of employment within the healthcare industry. "This is a tremendous honor and a validation of Morrison's position as a leading organization when it comes to engagement and being a fantastic place to work," says the company's CEO, Scott MacLellan. Morrison has won numerous awards, and recently was named a winner of the Kaiser Permanente "Most Fit Company" competition. For information about Morrison, see www.iammorrison.com.



GenCare's Ballard Landmark community held a preventive foot health seminar in July to introduce IPFH's Walking Partners Program to residents

GenCare launches IPFH walking program

In partnership with the Institute for Preventive Foot Health (IPFH) and Thor•Lo Inc., GenCare Lifestyle implemented IPFH's Walking Partners Program in its Ballard Landmark community in August 2011. As part of GenCare's commitment to the program, which it is rolling out in its six communities in Washington State and Arizona, the company invested US\$1,200 to purchase pedometers for residents. As a result of participating in the Ballard Landmark program, three people no longer needed blood pressure medication, and another improved his respiratory disorder, according to GenCare. To learn more about IPFH and Thor•Lo, refer to www.ipfh.org and www.thorlo.com. 

RESEARCH in the news



African-American women develop functional challenges earlier than others

While examining self-reported data about the lives of 8,700 older people, a sociologist from Case Western Reserve University in Cleveland, Ohio, identified an accelerated rate of reported physical limitations by African-American women in their mid-50s and 60s. The finding surfaced as researchers looked generally at how the intersection of gender and race/ethnicity affect health disparities among older African-Americans, Mexican-Americans and Whites.

Assistant Professor of Sociology David Warner found that, in general, the men of all racial/ethnic groups fared better than the women. And, those with education, economic means and higher net worth reported fewer physical health issues. “But we could not find the reason why African-American women developed limitations faster than other gender and racial/ethnic groups,” he says. These women gained more disabilities early on.

After the women reached their mid-60s, the rate of disabilities began to decrease, and by age 75, the pace of acquiring disabilities appeared to stabilize.

According to Warner and coinvestigator Tyson H. Brown, these findings demonstrate the need for health-prevention efforts aimed at eliminating functional health disparities overall, as well as for further research and interventions that address the unique health experiences of African-American women with age.

Sources: Case Western Reserve University, September 26, 2011; *Social Science and Medicine*, 72(8), 1236–1248, 2011

US Census Bureau releases analysis of 90+ population

The 90-and-older population in the United States nearly tripled over the past 3 decades, reaching 1.9 million in 2010, according to the report “90+ in the United States: 2006–2008,” released by the US Census Bureau and supported by the National Institute on Aging (US National Institutes of Health). As well, over the next 4 decades, this population is projected to more than quadruple.

Because of increases in life expectancy at older ages, adults ages 90 and older now make up 4.7% of the older population (ages 65 and older), as compared with only 2.8% in 1980. By 2050, this share is likely to reach 10%. The majority of those in the 90-plus demographic report having one or more disabilities, living alone or in a nursing home, and graduating from high school. Individuals in this age group also are more likely to be women and to have higher widowhood, poverty and disability rates than people just under this age cutoff. **Source:** US Census Bureau, November 17, 2011

Humor therapy helps manage agitation in dementia

Humor therapy is as effective as widely used antipsychotic drugs in managing agitation in individuals with dementia, and avoids serious drug side effects, ac-

cording to research presented at the 2011 National Dementia Research Forum in Sydney, Australia.

“Agitated behaviors include physical and verbal aggression, wandering, screaming, and repetitive behaviors and questions,” says lead researcher Dr. Lee-Fay Low, a Research Fellow in the School of Psychiatry at the University of New South Wales (UNSW), also in Sydney. “This is challenging for staff and often indicates unmet needs and distress in the residents of aged care facilities.” Between 70% and 80% of people with dementia experience agitation, according to UNSW.

The SMILE study explored the impact of humor therapy on mood, agitation, behavioral disturbances, and social engagement in dementia patients. The study across 36 Australian residential care facilities involved recruiting and training a staff member to act as a “Laughter Boss.” This individual worked with a humor practitioner with comedic and improvisation skills, not unlike “clown doctors” used in hospitals to aid recovery and lift mood in children.

Researchers found both short-term and persisting decreases in participant agitation in the study. A 20% reduction was noted with the 12-week intervention—improvement comparable to the use of antipsychotic drugs. “This shows humor therapy should be considered before medication for agitation,” concludes Low, “particularly taking into account [medication’s] side effects.” **Source:** University of New South Wales, September 21, 2011

ICAA Research Review. Stay up to date with current research by reading ICAA Research Review, the online newsletter of breaking news in health, wellness and demographics. Published 45 times each year, ICAA Research Review is emailed to International Council on Active Aging® members. For more information, visit www.icaa.cc or call ICAA toll-free at 866-335-9777.



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ICAA in 2011

This end-of-year report highlights some of the association's activities over the last 12 months

On October 1, 2011, the International Day of Older Persons, the International Council on Active Aging® celebrated the 10th Anniversary of its founding. ICAA staff, advisors, members and allies work to spread the organization's vision of Changing the Way We Age® and maximize opportunities for healthier, more vital aging. Throughout the year, Advisory Board and Visioning Board members joined ICAA colleagues to develop the five strategies resulting from the ICAA 2020 visioning process (sponsored by Morrison Senior Living), as outlined below.

1. Visioning Board amplifies work of Career Path Work Group

The ICAA Visioning Board launched the year by discussing recommendations made by the ICAA Career Path Work Group, which addressed the complex issue of defining the role of a wellness professional. During a telephone conference, Visioning Board members agreed that ICAA should move forward on the assumption that a wellness manager has knowledge of all dimensions, but is master of one or two. This role brings together the people in other disciplines

and functional areas to achieve a common goal.

Board members also identified functional areas within the domains of a wellness manager, based on the points identified earlier by the work group. As did members of the work group, Visioning Board members felt that today there is even more opportunity to solidify "wellness" as a key health promotion strategy. Their input will be used as a basis for organization of ICAA's education content in 2012.

2. ICAA/ProMatura Wellness Benchmarks expands

The first anniversary of the ICAA/ProMatura Wellness Benchmarks occurred in May, marked by the release of upgrades to make the online system's reports more valuable for program management. Better program management complements the core purpose of the benchmarks—to show the return to a retirement community that invests in wellness. Throughout the year, more communities entered the free, open access system to benefit from ICAA's strategy to enable them to improve the quality of wellness services and explain the economic value of wellness activities through the ICAA/ProMatura Wellness Benchmarks. Information on enrollment is available online at www.icaa.cc/Management/benchmarks.htm.

3. Rebrand Aging and ICAA's campaign launch

One ICAA strategy that took concrete form in 2011 involves leading members and colleagues in becoming the leading advocates in the battle to end ageism and counter aging stereotypes. The action plan developed by the Rebrand Aging Work Group emerged as ICAA's Changing the Way We Age® Campaign, powered by the ICAA Champions (see the article on pages 30–40 for more about the Champions). Announced at a press conference in May 2011, the groundbreaking initiative has already gained favor among the older adults and ICAA members who are promoting the anti-ageism philosophy. To learn more about the campaign, visit www.changingthewayweage.com.

The Rebranding Aging effort, targeted to media and marketers, likewise got off to a fast start with the publication of "ICAA's Guidelines for effective communication with older adults." In addition, an influx of submissions greeted the first ICAA Rebranding Aging marketing/ad contest, launched at the end of July (results were released at the recent ICAA Conference). To access the Rebranding Aging toolkit and contest information, go to www.changingthewayweage.com/media-marketers.htm.

ICAA's Changing the Way We Age® Campaign and Rebranding Aging materials were also discussed during the midyear conference call of the Advisory Board and Visioning Board.

4. Engagement Work Group releases opinion statement

In June, the Engagement Work Group, composed of members of the Advisory and Visioning boards, released their statement titled "The Case for Engagement: A Metric with Meaning for the Active-Aging Industry." In the statement, group members emphasized the need for meaning and purpose in the lives of older adults. They also called for a paradigm shift within the industry to a person-centered approach supporting an individual's goals and interests. The work group was seated to develop ICAA's strategy to promote engagement as a core principle when developing

programs and preparing professionals to work with the aging population. The opinion statement is available in the *Journal on Active Aging*®, May/June 2011, page 60.

5. Environmental Work Group produces white paper

To fulfill one aspect of ICAA's strategy to preserve the future, access the power of older adults and sustain the greater good through attention to environmental choices, a work group of ICAA advisors and friends wrote the association's first white paper on the environment. Released in July, "Practical strategies for providing wellness in outdoor environments" lists many ways to overcome barriers—accessibility, motivation, funding, staffing, organizational—so that older adults can safely spend time in nature. Recommendations for outdoor elements and design considerations are included. The paper, along with an image gallery of outdoor spaces that


exemplify recommendations, is available as a free download at www.icaa.cc/whitepapers.htm.

Additional highlights

Surveys define the active-aging industry. ICAA conducted its second Salary & Benefits Survey in July and August. Once again, the diversity of the active-aging workforce was evident in the results, especially the job description items associated with "wellness" job titles. The topline was released in August and more detailed results are in process. Information about the 2011 Salary & Benefits Survey is posted at www.icaa.cc/Management/researchandreports.htm.

To celebrate ICAA's 10th Anniversary, the association fielded a survey of members focusing on communication needs and methods. The purpose was to discover how ICAA members want to receive professional information, in preparation for planning the associa-

tion's education resources in 2012. For more information about the 2011 ICAA Member Survey, see the sidebar on this page.

Outreach, recognition and community. The last half of the year is a busy time at ICAA. Each year it seems that Active Aging Week, held in the last week of September, is hosted by more sites across the United States, Canada and other countries, spreading the message of the value of active living. In October, the selection of the Innovators, Green and Innovative Solutions award-winners is always exciting, as the wonderful work of active-aging advocates is showcased (brief profiles of this year's recipients appear on pages 60–65). And the grand finale of the year, the ICAA Conference, celebrated the 10th Anniversary with a slate of A-list presenters, a gala reception, the addition of a poster session, and a closing keynote by ICAA's founder, Colin Milner. 

ICAA's 10th Anniversary survey results

As part of the goal of celebrating its 10th Anniversary by looking to the future, the International Council on Active Aging® sent an online survey in October asking members and colleagues 10 questions about how they prefer ICAA to deliver their professional tools and information.

Of all the questions the association could have asked, why was the focus on sources of information? With so many choices in how people receive information, from traditional print to Twitter messages, the staff at ICAA needed clear-cut direction on the most appropriate methods to deliver membership benefits. Respondents were reminded throughout the questionnaire that answers should reflect their work needs, not their personal lives.

Many thanks to the 671 people who participated in the "10 Questions for ICAA's 10th Anniversary" survey. Here are some highlights from the results:

What work-related information do you look for? Background on a topic (91%),

launching a new service or program (76%), keeping up to date (74%), and research to purchase products or services (65%) topped the list.

The "most important" and "somewhat most important" resources you use when looking for information or tools for your work are:

- Internet searches using Google, Yahoo or similar search engines, 95%
- Colleagues and coworkers, 90%
- Webpages of associations, governments or similar neutral organizations, 85%
- Print publications, 93%

The "least important" and "do not use for work" information sources were Facebook and LinkedIn pages and Twitter.

While respondents wanted ICAA to continue providing information in print, both on paper and as a PDF, they nixed the idea of using podcasts or RSS news feeds that send stories to a computer/email. However, Internet sources such as

webinars, tutorials and videos were favorably viewed by respondents.

Considering these answers, it's not surprising that 58% of respondents conduct an Internet search on a daily basis, and 34% on a weekly basis. ICAA was pleased to see most respondents (88%) visit its website for their work and that three-quarters (76%) go to the site on a weekly or monthly basis.

Looking towards the future, in the next two years (2012–2013), most of the respondents' organizations (71%) plan to increase the number of wellness programs offered. In addition, 50% of these groups plan to increase marketing of their wellness services.

With the information on professional tools and resources given to ICAA through the survey, along with additional suggestions and comments, the ICAA staff is looking forward to planning the association's 11th year to meet members' needs and support their aspirations.

Exercise

and the aging brain



This article explores the impact of exercise on the aging brain—and affirms the message that ‘what is good for the body, is good for the brain’

by Terry Eckmann, PhD

Aging and brain health is a topic of great interest as the older-adult population continues to grow. In 1900, the average life expectancy was approximately 47 years, while today’s life expectancy is roughly 78.¹ It is estimated that women who now reach age 65 will have an average life expectancy of almost 85 and men who make it to 65 can expect to live to 82.¹ Longer life expectancy brings with it the need to maintain a healthy body and brain as the foundation for leading the fullest, most productive life possible.

Neuroscientists are gaining valuable information about the brain-body connection. In fact, we have learned more about the brain in the past 10 years than we did in the previous century. Dramatic new imaging techniques—Magnetic Resonance Imaging (MRI), Nuclear Magnetic Resonance Imaging (NMRI), Positron Emission Tomography (PET), and Single-Photon Emission Computed Tomography (SPECT)—allow researchers to study the workings of the human brain in action. This has opened a vast frontier of knowledge on cognition, memory and learning throughout life.

What neuroscientists have discovered in the past 5 years alone paints a riveting picture of the biological relationship between the body and the brain. The message is loud and clear! *What is*

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good for the body, is good for the brain.

The “use it or lose it” principle refers to brain health, as well as to muscle and cardiovascular fitness. And according to Small,² Nussbaum,³ Ratey⁴ and Medina,⁵ exercise is one of the most important predictors of brain health through the life span.

Neuroscientists have shown that the brain stays “plastic,” or changeable, in later life. Neurons, or nerve cells, should remain alive and able to maintain and form new connections and networks in response to learning.⁶ What this means is, just as with muscle and cardiovascular health, the brain can change in response to exercise and other positive lifestyle choices at age 9 months or 90 years.

To begin to see how exercise can positively impact brain functioning throughout the aging process, it helps to have an understanding of the brain and how it works.

About the brain

There is no greater or more complex system than the human brain. This amazing connection of neurons weighs approximately 3–4 lbs. and is responsible for all of our thoughts, emotions and behaviors. About the size of 2 fists together with knuckles touching, the brain accounts for nearly 2% of the body’s weight, yet consumes approximately 20% of its oxygen and 20% of its glucose. In addition, this organ—which is comprised of 78% water, 10% fat and 8% protein—needs about 8–12 glasses of water a day and 8 gallons of blood an hour for optimal functioning.⁷

The brain has about 100 billion neurons that can connect many times to form synaptic connections. Each neuron has an electrical chemical response. The nucleus is where the neuron fires to begin the electrical chemical response, while the axon is the long arm of the neuron that carries electricity and chemicals to communicate to another nerve cell.

Chemicals travel down the axon to the terminal where the chemicals jump across a space called the synapse and lock into the neuron’s dendritic receptors. Dendrites are the finger-like projections of the neuron. When we learn something new and when we exercise, we grow dendrites and dendritic branches, thereby increasing the brain’s ability to store and transmit information.⁸

As early as age 40, however, we start to lose approximately 5% of brain volume every decade of life.⁴ It is estimated that 50 million Americans suffer from diseases of the brain, according to the National Institute of Neurological Disorders and Stroke, one of the country’s National Institutes of Health.⁹ And in the United Kingdom, Alzheimer’s Disease International estimates that there are 35.6 million people living with dementia worldwide.¹⁰ Dementia is a brain disorder that seriously affects a person’s memory, thinking and reasoning skills. The most common form of dementia is Alzheimer’s disease.

In the United States, one in eight people ages 65 and older has Alzheimer’s disease, while the prevalence rises to nearly half of those ages 85 and beyond.¹¹ Women appear to be more susceptible. Approximately 16% of women ages 71 and older are believed to have Alzheimer’s or another form of dementia compared with 11% of men.¹¹

Usually, Alzheimer’s disease begins after age 65, but it is not a normal part of aging. Although age is one of the most important risk factors for Alzheimer’s, genetics plays a major role. Studies suggest that keeping the brain and body active may be among the most important ways to reduce risk and possibly prevent the disease.¹²

What happens to the aging brain without exercise?

Without exercise, the heart, lungs and muscles work less efficiently together. When that happens, the brain gets less of the blood, oxygen and glucose so

vital to its functioning. Further, lack of physical activity is a risk factor for heart disease, diabetes, cancer, stroke, obesity and high blood pressure, which also have an effect on brain function.

How we age is determined both by genetics and lifestyle choices—approximately one-third of brain aging is genetics and two-thirds, lifestyle. Aging is a continuous process from birth, though. That means Alzheimer’s, like heart disease, doesn’t start at age 60 or 70, but early in life.

The mental and physical diseases we face in the aging process are directly tied to the cardiovascular and metabolic systems. For example, diabetes increases risk of dementia by 65% and high cholesterol increases this risk by 43%.⁴ As insulin levels drop throughout the aging process, glucose has a harder time getting into the body’s cells to fuel them, causing blood glucose levels to increase. This raises the risk for diabetes. High glucose levels also create waste products that damage blood vessels and increase risk for stroke and Alzheimer’s disease.

As we age, cells in the body gradually lose their ability to adapt to stress. Neurons in the brain are affected in much the same way. Synapses erode when neurons get worn down from cellular stress, eventually severing the connections between them. With this decreased activity, the dendrites physically shrink and wither. If the neuronal, dendritic and synaptic decay outpaces the new construction of connections, we begin to see problems with mental function. Cognitive decline and neurodegenerative diseases typically stem from dysfunctional and dying neurons. Exercise can make a difference, counteracting many of the effects that lead to the loss of brain function possible with the aging process.

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Table 1. The effects of 30 minutes of moderate to vigorous aerobic activity

• Stimulates brain-derived-neurotrophic-factor (BDNF), which helps neurons and dendrites grow and thrive.
• Causes neurons to fire more efficiently.
• Increases levels of vascular endothelial growth factor (VEGF) and insulin-like growth factor (IGF-1), which build and maintain activity within the cell circuitry.
• Increases the generation of neurons in the hippocampus, an area of the brain associated with memory.
• Balances brain neurotransmitters and hormones, which enhances the body’s function.
• Gets oxygen and glucose to the brain faster by strengthening the cardiovascular system.
• Strengthens dendritic branching through repetitive gross-motor movement.
• Reduces obesity (obesity leads to cardiovascular disease, diabetes, high cholesterol and high blood pressure, which are all risk factors for dementia/Alzheimer’s).

What happens to the aging brain when we exercise?

A great deal of research supports the positive impact of regular aerobic exercise on the aging brain.^{2,3,4,5,6,8,13} For example, one study of healthy adults ages 60–75 found that mental tasks involved in executive control—monitoring, scheduling, planning, inhibition and memory—improved in a group doing aerobic exercise, but not in a control group.¹⁴ Also, a longitudinal study of older Australian men¹⁵ concluded that 3 in 4 men who reach the age of 80 undergo successful mental-health aging; associated factors include education and lifestyle behaviors such as physical activity.

Regular exercise keeps the brain functioning optimally through the ways listed in the table on this page. The sections below discuss these effects in more detail.

Exercise changes the brain

Aerobic exercise increases brain-derived-neurotrophic-factor (BDNF), which is the most prominent in a family of proteins referred to loosely as neurotrophic factors. Neuroscientists have determined

that BDNF has a fertilizer effect on the brain’s neurons and dendrites, helping them to grow and flourish. Tellingly, in 1990 there were a dozen papers on BDNF; now there are more than 5,500. Regular aerobic exercise increases insulin-like-growth factor (IGF-1) and vascular-endothelial-growth-factor (VEGF) as well, two proteins that build and maintain activity within the cell circuitry (the infrastructure of neuronal connections).

BDNF plays a significant role in neurogenesis, which is the process of stem cells dividing and developing into functional new nerve cells (neurons) in the brain. Studies have confirmed that neurogenesis occurs in the adult human, with the hippocampus being the major area for nerve cell growth. This area of the brain is associated with both long- and short-term memory and spatial orientation. While most studies on hippocampal neurogenesis have been conducted with rats,¹⁶ Eriksson and colleagues¹⁷ investigated whether neurogenesis occurs in the adult human brain, specifically the hippocampus. The researchers obtained human brain tissue postmortem from patients who had

been treated with a chemical that identifies new neurons. Results indicated that the human hippocampus retains its ability to generate neurons throughout life.

So exercise both spawns neurons and stimulates an environment that enriches their growth and survival. Aerobic exercise also increases levels of important neurotransmitters, brain chemicals that transmit signals across synapses, to traffic in thoughts and emotions. Serotonin is the policeman of the brain, keeping brain activity under control. Norepinephrine amplifies signals that influence attention, perception, motivation and arousal. And dopamine is the learning, reward, attention and movement neurotransmitter. Most of the drugs used to improve mental health target one or more of these three brain chemicals.

In addition, regular aerobic exercise sends lots of oxygen-soaked blood to the brain to deliver glucose and oxygen while removing waste products that inhibit the process. Aerobic activity also improves the ability of both body and brain to use glucose to provide energy. (Remember, the brain uses 20% of the body’s energy.) By increasing receptors on muscle cells, aerobic exercise enhances the muscles’ ability to use glucose for energy; it also increases levels of IGF-1, which regulates insulin in the brain, thereby improving synaptic connections. High glucose levels negatively impact the brain by decreasing levels of BDNF. Regular exercise helps to keep glucose at an optimal level.

Of further note, brain volume grows with regular aerobic exercise due to an increase in capillaries, blood volume, nerve cell growth, and dendritic branching. Exercise increases blood flow by expanding the network of blood vessels in the brain while stabilizing existing “transportation structures.” This increased capillarization raises levels of oxygen and glucose in the brain.

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According to Rogers et al.,¹⁸ recently retired adults who exercised had nearly the same level of blood flow in the brain after 4 years, while an inactive group saw a significant decrease. In addition, Kramer and colleagues¹⁹ compared adults ages 60–79 years who walked 3 times weekly at 40–70% maximal heart rate, to those who stretched an equal number of times per week. After 6 months, the walkers had improved their ability to take in, transport and use oxygen by 16% as measured by maximal oxygen consumption (VO₂ max) testing. They had also increased their brain volume in the frontal and temporal lobes, as evidenced by brain MRI scans.

Health and lifestyle: exercise is medicine

What is good for the body, is good for the brain—and so is the opposite. People who are obese are twice as likely to suffer from dementia, and if we factor in high blood pressure and high cholesterol, conditions that often accompany obesity, the risk may actually be sixfold.⁴ Exercise plays a significant role in reducing obesity by burning calories, boosting energy levels, lowering stress, reducing appetite, elevating mood and increasing motivation.

Research indicates that stress also may be detrimental to brain health and memory performance.²⁰ When we feel stressed, our adrenal glands release a chemical called cortisol, and chronically high levels of cortisol lead to cell death in the hippocampus. Studies of Vietnam veterans in the US show that prolonged exposure to stress does adversely affect this area of the brain.²¹ Human investigations further indicate that several days of exposure to high cortisol levels can impair memory.²² Chronic stress can contribute to depression and anxiety disorders as well, which interfere with normal memory processing, especially as people age.²³ This suggests that learning to manage and minimize stress may have a beneficial impact on brain health.

Depression, too, is positively affected by regular exercise. In fact, an exercise training program may be considered an alternative to antidepressants for treatment of depression in older adults, according to Blumenthal et al.²⁴ In this study of 156 men and women over age 50 who were randomly assigned to a program of aerobic exercise, antidepressants or a combination thereof, exercise was equally as effective and more long-lasting than antidepressants in decreasing depressive symptoms, even though these drugs may have facilitated a more rapid response to treatment.

Exercise is medicine. Choosing exercise regularly makes a difference in achieving a healthy body and brain.

What are the effects of exercise on dementia/Alzheimer's?


The lifestyle choices that lead to obesity, diabetes, high cholesterol, high blood pressure and heart disease also increase risk for deterioration of brain health, as mentioned previously. Studies suggest that exercise can lower risk of dementia by 50–60%,⁵ and decrease Alzheimer's risk by 60%.²⁵ Friedland and colleagues²⁶ conducted a study with 500 participants that determined those who were physically active were 3 times less likely to get Alzheimer's.

To some extent, exercise counteracts vascular damage. Stroke and Alzheimer's patients who participate in aerobic exercise sometimes improve their scores on cognitive tests. It is suggested that because physical exercise increases cerebral blood flow (which in turn promotes neurogenesis), there is decreased risk of Alzheimer's for those without the disease and regeneration of neurons for those experiencing it.^{4,19}

The best way to guard against neurodegenerative disease is to build a strong brain. Aerobic exercise accomplishes this by strengthening connections between brain cells, creating more syn-

apses, developing neurons and increasing dendritic branches. Weuve et al.²⁷ studied 18,766 women ages 70–81 and found that those with the highest levels of energy expenditure had a 20% lower chance of being cognitively impaired on tests of memory and intelligence. The research indicated positive results even with modest levels of walking 90 minutes a week, and best results from 4 hours running or 12 hours walking per week.

Regular exercise further helps the brain by slowing the natural decline of the stress threshold with aging. The mild stress of exercise improves the ability to cope with more severe stress. It also reduces toxic levels of cortisol and increases levels of BDNF, particularly in the hippocampus.²⁸

If the brain isn't actively growing, it is very likely dying. The good news is that beginning an exercise program at any age can benefit both brain and body. In a review of literature, Kramer et al.¹⁹ indicated that the benefits of physical exercise promote brain and cognitive vitality well into older adulthood. The body was designed to move; we know now that the more we move the body, the more we engage the brain. Through this brain-body connection, we can build and maintain a healthy body and brain with exercise—and lay the foundation for the most productive, full life possible at any age. 

Terry Eckmann, PhD, is a professor at Minot State University (MSU) in North Dakota. Eckmann serves on the Advisory Board for the International Council on Active Aging®. She presents internationally and writes for a variety of publications on topics relating to exercise and aging. Eckmann has been recognized for her work, with awards including the North Dakota Association for Health, Physical Education, Recreation and Dance

Continued on page 28

Spread the Word.



Wear a Pin.

The ICAA Champions program is one way for organizations and individuals to support ICAA's Changing the Way We Age® Campaign. Now you can demonstrate that support with a campaign pin. Buy a single pin to wear, or as many as you like to give away, sell or exchange for donations to fund Champion activities. If you believe that now is the time to change the way we age, help spread the word as an ICAA Supporting Champion.



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(NDAHPERD) University Honor Award and University Teacher of the Year Award, MSU Board of Regents Award for Research and Scholarship, IDEA Make Fitness Happen Award, and Industry Enhancement Award from Club Industry.

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ICAA Champions in action:

initiative gains
momentum, makes
inroads across
North America

Organizations and individuals demonstrate the vibrant power of active aging

by Marilyn Larkin, MA

In the September/October issue of the *Journal on Active Aging*®, the International Council on Active Aging® (ICAA) provided a step-by-step guide to help organizations and individuals join the ICAA Champions program. An integral part of ICAA's Changing the Way We Age® Campaign, ICAA Champions serve as role models and educators in the effort to shift society's perceptions of aging.

Over the past few months, fueled in part by Active Aging Week—the annual event initiated by ICAA and observed

during the last week of September—the Champions program has taken off in communities across North America. Organizations and individuals are experiencing the power of the program to transform perceptions of aging and engage people of all ages in meaningful, life-enhancing activities.

“This is just the beginning,” states ICAA Founder and CEO Colin Milner. “We are gratified to see how our members are embracing ICAA's Changing the Way We Age® Campaign as a whole, and the Champions program in particular. Hundreds of ICAA Champions are now leading the way, and we expect hundreds more to join them in coming months, and thousands in coming years.”

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ICAA Champion Scott Smith, a resident of Atria Merrimack Place in Newburyport, Massachusetts, gives a lecture on astro physics during a school visit. Image courtesy of Atria Senior Living

ICAA Champions in action: initiative gains momentum, makes inroads across North America

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In Prince George's County, Maryland, the most recent parks and recreation guide features an encouraging article and photographs to spread the message of ICAA's Changing the Way We Age® Campaign. Image courtesy of Maryland-National Capital Park and Planning Commission, Prince George's County, Department of Parks and Recreation

The ICAA Champions program is free of charge, and beyond individual engagement and satisfaction, benefits include an organizational and/or individual webpage, multiple support tools, and publicity via press releases and social media. Interested parties can find out more about the program and apply online at www.changingthewayweage.com/champions.htm. Meanwhile, check out the snapshots below to learn what participation involves for some organizations and individuals who have already made a commitment and are actively involved.

Atria Senior Living: providing the right opportunities

Atria Senior Living, which has 127 communities across the United States, joined ICAA's Changing the Way We Age® Campaign as a Founding Organization at the outset of the campaign, in May 2011. Since then, more than 250 Atria residents have become ICAA Champions, according to National Engage Life Program Director Stacey Belt, CTRS.

"We launched the program with the goal of having at least one Champion from each community, and we were able to reach and surpass that goal early on," Belt says. "We worked hard with each community on reaching that goal, providing motivation, contests and trainings to ensure we achieved what we had set out do.

"Now we're working on getting the Champion profiles completed for ICAA's campaign website, and making sure we're providing the right opportunities for each person to talk about the importance of active aging, either inside our own communities or in the community at large," Belt comments.

Since a primary goal of the ICAA Champions program is to promote a realistic and more positive view of aging, these older adults do not have to be "superstars." "We reinforce that message by letting our residents know that they can participate regardless of their ability level," Belt explains. "A woman in a

wheelchair asked, 'Is this right for me?' We said, 'Absolutely.' This woman gets up every day and goes to exercise classes. She definitely sets an example for others."

Residents at another Atria community were particularly concerned about the obesity epidemic in children. "So they arranged for children to come to the community, where resident Champions lead them in exercise programs and act as mentors," states Belt.

Along with spreading the message inside Atria communities, many residents are also going into local schools and seniors centers, where they make presentations on active aging and other topics. For example, Scott Smith, 88, a Champion who lives at Atria Merrimack Place in Newburyport, Massachusetts, has given talks on astronomy during a science lesson. Separately, Smith encourages his peers to remain active by talking about environmentalism, leading bird-watching groups, and spearheading discussion groups at mealtimes. "Talking about current events keeps us connected to the world," he says, "so we don't feel like dropouts." Smith also notes that his tablemates participate in more activities since he joined them.

To be successful, an organization's Champion program needs support from the top down, emphasizes Belt. Atria's senior management "is totally behind this endeavor," she stresses. "We're very much in tune with our residents being active no matter what their age, and continuing to learn and grow. And so, when the ICAA Champions program launched, it was perfect for us."

That said, "residents were a bit worried at first about getting involved, thinking it would be a big job," Belt acknowledges. "But after we educated them, using the PowerPoint presentations and

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ICAA Champions in action: initiative gains momentum, makes inroads across North America *Continued from page 32*



Kisco's Alex Gerasimon, wellness director of BridgePoint at Los Altos (California), finishes the 100th Bay to Breakers race in San Francisco with a community resident. Image courtesy of Kisco Senior Living

other support tools in ICAA's online Champion toolkit, they understood that the program really is about living an active lifestyle, and that is very consistent with what we already do. So the keys to having a successful Champion program," she believes, "are getting all staff to believe in its value, live it in the culture, and provide opportunities for residents to feel empowered by what they are doing." The ICAA Champion pins were also an incentive, she adds, in that they made Atria's Champions "feel excited and important" (see the box on page 37 for more about these pins).

Parc Communities: engaging in meaningful activities

At Parc Communities in Atlanta, Georgia, Wellness Director Angela Butler-Hackett welcomed the ICAA Champions program as a way of engaging residents in meaningful activities. "A number of our residents complained that they weren't giving back to society as much as they wanted to," Butler-Hackett explains. "Some were depressed

about not having opportunities to do so, saying such things as 'I don't feel like I'm needed anymore.' They felt they had so much wisdom and knowledge that they wanted to share."

Convinced that becoming an ICAA Champion Organization would provide such opportunities, Butler-Hackett launched the program during Active Aging Week with a series of intergenerational activities. For example, five residents from the Parc at Piedmont community visited the East Side Christian School in Marietta, Georgia, where they led exercises from the community's Ageless Grace® program with 35 second graders. Nine residents from the Parc at Duluth ran a similar program with 60 third graders at Notre Dame Academy, also in Duluth.

Interestingly, during the exercise program, "the children were saying things like, 'Hey, my legs are getting tired,' or 'My arms are getting tired,' but the residents just kept going along and having a great time," Butler-Hackett says.

Before embarking on these programs, Butler-Hackett and the Parc Champions introduced themselves by talking about ICAA's Changing the Way We Age® Campaign. "We asked the children to raise their hands if they had grandparents or great-grandparents living, then we asked them what their relatives do that's active," Butler-Hackett shares. "Through the exercise program, we helped them see that older family members might be capable of doing more than they thought they could."

Youngsters at the East Side Christian School also interviewed the Parc residents about what it was like to be in the second grade when they were children. One community resident, ICAA Champion Ruth Swanzy, explained that "we had more grades together in one big room, but the older children helped by teaching the younger ones." She added

that "of course, we didn't have air conditioning or any of the games and things [you] enjoy now."

According to Butler-Hackett, the second graders sent thank you notes after the visit, and a child wrote to one of the residents, "You are the coolest old person I've ever met."

Butler-Hackett credits the ICAA Champion toolkit with helping to make the Parc Communities program a success. For example, prior to Active Aging Week, she presented the "Changing the Way We Age across the wellness dimensions" PowerPoint to residents, then asked, based on the messages and commitment involved in the campaign, who they felt would make good Champions. The residents nominated several of their peers, including Swanzy, who went on to participate in the intergenerational programs described above.

Separately, Butler-Hackett has made presentations to professionals using parts of the toolkit PowerPoints. She also distributed ICAA's one-page handout on the campaign. In January 2012, the active-aging professional will include some of the toolkit information in a presentation to the local chapter of the National Aging in Place Council, and to the Human Factors and Aging Laboratory at the Georgia Institute of Technology. Then in February, Parc Communities will hold additional intergenerational outings for Champions at both of its locations.

What are Butler-Hackett's take-home messages for other organizations thinking of joining the ICAA Champions program? "Definitely utilize the tools ICAA has given us," she says. "I've printed out a lot of the materials and used them word for word, instead of trying to reinvent the wheel." With respect to intergen-

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www.ipfh.org



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Dear ICAA Family,

THOR•LO, Inc., the maker of Thorlos® brand engineered padded socks, and the Institute for Preventive Foot Health (IPFH) are proud to announce that we have become founding sponsors of the ICAA Rebranding Aging and Champions program. A key component of the Changing the Way We Age campaign, the Champions program represents an ideal platform from which to spread the message of **preventive foot health**. Active aging and a vigorous lifestyle by definition entails spending a lot of time in activities **on our feet**. For us to stay active and vital as we age, we have to take care of our feet proactively, not wait until they start to cause us pain, or even worse, blisters or ulceration.

We tend to ignore our feet until they hurt. Our mission is to encourage, through education, research, and proper use and fitting of socks and footwear, the awareness of people everywhere of the need to protect the soft tissues of their feet and to prevent foot issues before they start, especially as we age.

We know that there is a gradual and predictable process for the feet as we age. We lose the fat pads that protect the bottoms of our feet; and by the time we are in our 40's and 50's, many of us have lost up to HALF of those pads. By the time we are in our 60's and beyond, we literally are walking mostly on our bones. Our feet also get wider as we age, and the bones and ligaments become less resilient and more vulnerable to injury. But much of this damage can be prevented if we will only take the simple measures of protecting the soft tissues of our feet by choosing the right footwear (what we call the "Integrated Solution"™ consisting of an appropriate engineered padded sock, an insert or orthotic as necessary, and the most appropriate shoes, all properly fitted and purchased together as a system). Proper care of the skin and nails, plus good hygiene completes the process of preventive foot care.

And, of course, there are special precautions that people with diabetes should take for protecting their feet. The incidence of diabetes increases as we get older: 18% to 20% of people aged 65+ have diabetes, with another 20% having "pre diabetes" or impaired glucose tolerance. Diabetes can have serious effects on the feet; and it is important to recognize that even those who have their condition under control should exercise special care for their feet.

THOR•LO and IPFH will be providing support to help the Champions focus on the message of "changing the way we age." At the same time we want to convey the message that a foundational component of changing the way we age includes **rethinking foot care**, which BEGINS with soft tissue protection provided by the right engineered padded socks.

We are delighted to be in this collaborative partnership with ICAA, and we encourage each of you to get involved in **changing the way we age**. We look forward to working with all of the ICAA members and Champions as we undertake this imaginative and timely initiative spearheaded by ICAA. Join us in changing the way we age!




Jim Throneburg
Chairman of the Board
THOR•LO, Inc.




Bob Thompson
Executive Director
Institute for Preventive
Foot Health

ICAA Champions in action: initiative gains momentum, makes inroads across North America

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Fitness and Wellness Director Cammy Dennis and fitness instructor Champion Jessica Pinkowski lead a group of residents from On Top of the World Communities in Ocala, Florida, in a half-marathon. Image courtesy of On Top of the World Communities, Inc.

erational activities, “it takes some work and effort to coordinate them, but the payback of watching the residents and kids is bigger than I thought it would be.” Butler-Hackett continues, “Our Champions are working to bring in residents who didn’t participate the first time. And the kids keep asking when we will come back. It’s something that’s so rewarding and costs very little,” she adds, “but you get such a return in terms of the human touch, and that wonderful intergenerational communication.”

On Top of the World Communities: creating the atmosphere for change

ICAA has been “a fabulous resource for us, and I always tune into what the organization is doing,” says Fitness and Wellness Director Cammy Dennis, of On Top of the World Communities in Ocala, Florida. “So when I saw an opportunity to join the campaign, I jumped on it.” The 55-plus active adult community—and ICAA Champion Organization—

is home to about 8,000 residents, who live in various neighborhoods on the large campus.

To get started, Dennis pulled in “a small, core group of staff and consultants” to serve as ICAA Champions. Part of their mission would be to expand programming options for On Top of the World residents, beyond what Dennis sees as a “one-size-fits-all approach,” particularly in fitness. “A typical chair-exercise class conjures up images of older, frailer adults, and that’s not what our community is all about,” she states. “Although we do have individuals with those needs, and plenty of programs for them, we also have people who walk half-marathons, hike and do kickboxing. By offering plenty of alternatives, we step away from a situation where we define what fitness is supposed to be for them, and say, ‘You define that for yourself.’”

Dennis also encourages fitness instructor Champions at On Top of the World

Communities to bring more wellness principles into their classes. “We want them to think beyond physical fitness,” she explains—“for example, how can the classes they run be social? emotional? educational? Would it help to take their class outside?” This has helped the community’s program “evolve to the point that we have wellness walks, tai chi outdoors, and other activities that blend mind and body.”

Recently, Dennis announced the Champions initiative to the entire company, and is trying to bring all staff on board. Doing that presentation “gave me an opportunity not only to talk about fitness and wellness, but also to pull in people from construction to talk about why our homes are good for older adults, and from the Master the Possibilities Learning Center to talk about how those programs tie in,” she says. Dennis also brought in the marketing department. Why? “Because the images and everything else we put out to the public say a lot about how we view our residents and what we think about aging,” she states.

During the discussion, Dan Dowd, who directs the community’s Master the Possibilities Learning Center, commented: “It’s not so much that we’re changing the way people age; we’re creating the atmosphere for that to happen, and letting people do that themselves.”

Jessica Pinkowski, a lead instructor at On Top of the World Communities, is one of the Champions helping to create that empowering atmosphere. “I do my best to use each class to take participants through a journey, with the goal of making them aware of why aging actively is so important,” she says. “I help them see what they’re capable of, and what the benefits are—preventing disease, performing daily activities better, increasing the quality of their lives.” Pinkowski, who is in her mid-30s, also educates instructors who are new to working with the community’s population, helping

them to understand the connection between fitness and wellness.

Paradoxically, Pinkowski's emphasis on improving the quality of life for On Top of the World residents has had an effect on her own. "One thing I say to our residents is that living an active lifestyle doesn't mean you have to exercise every day; it's about moving and staying active. Now it's the same for me," she comments. "I don't want to take my car to the carwash; I'll wash it myself. I don't want somebody else to clean my house; I will push and pull the vacuum cleaner myself. And that translates to activities with my peers as well—when I don't want to play tennis on the video

How to support the ICAA campaign

The ICAA Champions program is just one outlet for organizations and individuals to support ICAA's Changing the Way We Age® Campaign. A pin is now available to heighten campaign visibility and help people show their support. You may purchase a single pin to wear, or buy as many pins as you like to give away, sell, or exchange for donations to fund Champion activities. For those who believe in ICAA's campaign but have chosen not to get more actively involved, spreading the word through campaign pins is a way to be an ICAA Supporting Champion.

Organizations can also become an ICAA's Changing the Way We Age® Campaign program partner. Three levels of participation are available to those committed to playing a more prominent role in these efforts. For further information about partnership opportunities and campaign pins, visit www.changingthewayweage.com or call ICAA at 866-335-9777 (toll-free) or 604-734-4466.



Five resident Champions from Parc Communities' Piedmont campus meet second graders from the East Side Christian School in Marietta, Georgia. The Champions later exercised with the students and answered their questions about the second grade in years gone by. Image courtesy of Parc Communities

game, but want to play outside and actually go through the motions in real life. That's the way I'm seeing myself moving through this."

Kisco Senior Living: raising awareness

ICAA Champion Organization Kisco Senior Living, with headquarters in Carlsbad, California, and 19 communities in six states, began by enlisting staff as Champions; now those staff have started recruiting resident Champions. Maria Connelly, wellness team leader for the Art of Living Well Services, and Kendall Carre, marketing manager, explain why and how the organization committed to the program.

"We've been with ICAA since its inception, and our vision is very similar to the goals of ICAA's Changing the Way We Age® Campaign," says Connelly. "We don't view aging as negative. We view it

as a later stage of life where people have so much to bring to a community—their wisdom, their history, and also the ability to share those experiences with families, children and grandchildren. So when the ICAA Champions program started," she adds, "we saw it as part of our responsibility to help others outside the community understand and appreciate a more realistic picture of aging. It's a more positive picture than what is sometimes portrayed through media, or what many families might perceive happens when someone gets old."

The ICAA Champion toolkit was instrumental in helping to launch the program at Kisco, Connelly observes. She and Carre have used the training PowerPoint in Kisco locations to present the program and train new Champions, and the community presentation during outside

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events and conferences. They've also tailored the press releases and one-page handout for use as promotional pieces.

"We started by presenting the program at our home office in Carlsbad, where people became very excited about the campaign and the role of individual Champions," Connelly observes. "They began signing up right there. Now we have nine wellness Champions who are recruiting residents to be individual Champions."

To help raise awareness, Kisco included both the ICAA and campaign logos on all of the organization's advertising for Active Aging Week in newspapers and mailers. Carre also sent out press releases for every community that included their Active Aging Week activities along with a paragraph explaining the ICAA Champions program and Kisco's recognition as a Champion Organization in ICAA's Changing the Way We Age® Campaign.

Since then, individual resident Champions have become involved in various activities in local Kisco communities. In North Carolina, for example, residents were invited to a local school to participate in a history lesson about the Depression era. "The students broke out into six groups, each with a Kisco resident," shares Connelly. "As the lesson went on, these students were able to talk with the resident about what it was like to live through that era. This intergenerational activity was very well received," she notes, "and the residents have been invited back to participate in a whole series of lessons. It's only one example," Connelly adds, "and we intend to expand from there, enlisting our residents to speak to different organizations as well, because they are the role models who represent that positive, realistic picture of aging."

Kisco also is mining the potential of future residents. Dr. H. Stanley Jones,



Led by Champions from Parc Communities' Duluth location, third graders at Notre Dame Academy in Duluth, Georgia, do exercises from the Ageless Grace program offered by the senior living organization. Image courtesy of Parc Communities

author of *Quality of Life: Achieving Balance in an Unbalanced World* (Kauai Press, 1994), a future resident of Kisco's Ilima at Leihano on Oahu, Hawaii, will speak about his book at two Kisco communities in California. "The book ties nicely to the campaign because Jones talks about the importance of enhancing your quality of life and taking personal responsibility," Connelly comments.

"The Champions program is fairly new for us and we're continually coming up with ways to incorporate it into our advertising and outreach," adds Carre. "Our intention is to include both logos in all of our ads for every community going forward in 2012, as an identifying emblem that really speaks to our philosophy. People may call and ask, 'What's this?' And that will give us another opportunity to have a dialogue."

Carre further intends to include the fact that Kisco is an ICAA Champion Organization in the short blurb that runs with every press release. "We have a lot of these promotional efforts in the works," she says, "and are evolving as we move forward."

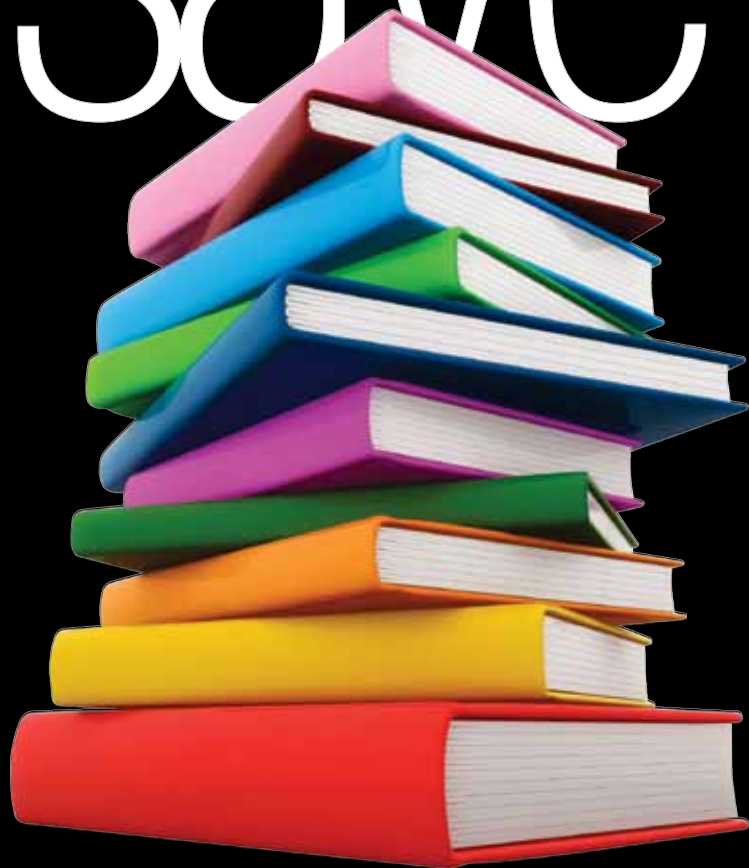
Dayna Stoddart, Ballantrae Golf and Country Club: inspiring people

While organizations are engaging older adults and staff as ICAA Champions, some professionals are simply signing up on their own. One such individual Champion is Dayna Stoddart, wellness director at Ballantrae Golf and Country Club in Toronto, Canada, a gated community of 950 homes for active older adults. "What inspired me to become a Champion is my passion for promoting and educating about lifestyle choices, wellness and preventive strategies," explains Stoddart. "I saw this as an opportunity to become even more proactive in my current role, and to create awareness not only in our community, but outside the community, too."

During Active Aging Week, Stoddart twice presented ICAA's Champion toolkit PowerPoint, "Changing the Way We Age across the wellness dimensions," to Ballantrae residents. "We had an overwhelmingly positive response from our

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ICAA Champions in action: initiative gains momentum, makes inroads across North America

Continued from page 38

residents, and some came to me interested in being Champions themselves,” she says. “That hasn’t happened yet, but I will be helping to facilitate their joining the program.” Stoddart also interested a local newspaper, the *Stouffville Free Press*, in covering her work as an ICAA Champion; that article is posted on the campaign’s Facebook page (see “Resources” on this page).

As she helps pave the way for interested Ballantrae residents to become Champions, Stoddart will continue her individual efforts. She intends to give a presentation in a local school to help create awareness of active aging. “As a mother of three young children, I hear the way some of the talk goes about older people, and I’m trying to change those negative perceptions with them, as well.”

Stoddart, 41, further hopes she will inspire people by continuing with her hobby, fitness competing. But she is capable of becoming inspired, too. In a recent competition, a 60-year-old woman competed in the grand masters division. “I learned that she trained for two years so she could get on that stage and compete,” Stoddart says. “I thought, I totally understand where she is coming from. What a wonderful achievement.”

Darilyn Marinelli, Prince George’s County Department of Parks and Recreation: spreading the word

ICAA member Darilyn Marinelli has not formally signed on as an ICAA Champion, but she is committed to ICAA’s Changing the Way We Age® Campaign. Marinelli helps to spread the word through her role as senior services coordinator for the Maryland-National Capital Park and Planning Commission, Department of Parks and Recreation in Prince George’s County, Maryland. The department publishes a quarterly *GUIDE to Parks and Recreation*, and the cover of the winter 2011 edition, titled

“Changing the Way You Age,” includes photographs of older adults participating in a variety of activities. Inside the cover, an introduction to the feature article states:

“The Maryland-National Capital Park and Planning Commission encourages seniors to make a change in their daily routine and improve the way that they age. This year’s International Council on Active Aging’s (ICAA) Changing the Way We Age® Campaign focuses on changing negative perceptions and views of aging. In support of this, the Department of Parks and Recreation embraces an active-aging philosophy and believes that any individual can engage in an active lifestyle, regardless of age or physical state.”

To further promote this campaign, Marinelli did a formal presentation to the Prince George’s County Planning Board in November, sharing the Changing the Way We Age® message and vision, and how that vision will guide the delivery of senior services in the Parks and Recreation Department. “We’re embracing the campaign as part of our marketing and community outreach efforts to approximately 125,000 older adults in Prince George’s County,” she explains. “It’s another way for us to engage these individuals in our parks and recreation programs. Keeping people active and involved in their later years also keeps them healthier, happier and connected,” comments Marinelli. “And when other older adults see everyone who’s involved, they’ll think, ‘I can do that, too.’”

Marilynn Larkin, MA, is an award-winning medical writer and editor, as well as an ACE-certified personal trainer and group fitness instructor. She is also ICAA’s Communications Director and a regular contributor to the Journal on Active Aging®.

Resources

Atria Senior Living

www.atriaseniorliving.com

Ballantrae Golf and Country Club

www.ballantraegolflifestyle.com

ICAA’s Changing the Way We Age® Campaign

www.changingthewayweage.com
(also on Facebook)

Kisco Senior Living

www.kiscoseniorliving.com

Maryland-National Capital Park and Planning Commission

www.mncppc.org/commission_home.html

On Top of the World Communities

www.otowfl.com

Parc Communities

www.parccommunities.com

Prince George’s County Department of Parks and Recreation

www.pgparcs.com

Print

“Changing perceptions of aging”

Publisher: *Stouffville Free Press*,

October 26, 2011

<http://stouffvillefreepress.com/articles-2/freepressnews/changing-perceptions-of-aging>

“ICAA Champions program: a quick-start guide for your organization”*

Author: Marilynn Larkin

Publisher: *Journal on Active Aging*, 10(5), 24–33, September/October 2011

* Available in the “Articles archives” (“Industry development”) in the members only section of the International Council on Active Aging website, www.icaa.cc



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ICAA's top 10

articles on communication



Seeking insight into communication-related topics? Explore these 10 articles published previously in the *Journal on Active Aging®* and *Functional U®*

To celebrate the International Council on Active Aging's 10th Anniversary, the *Journal on Active Aging®* (JAA) is highlighting some articles featured in ICAA publications over the last decade. Through the coming year, each issue of the *Journal* will include a "top 10" list of articles drawn from the association's extensive online library. Every list will focus on a specific topic. For this issue, communication is the focus.

The *Journal*, ICAA's flagship publication, has published a diverse collection of articles since its launch in 2002. The association has added other publications over the years including, among others, *Functional U®*, a bimonthly electronic publication aimed at practitioners; *ICAA Developer's Guide*, an annual print publication geared to owners and developers; and *ICAA Green Guide*, an annual electronic publication focused on environmental wellness and stewardship. ICAA members can access articles from these publications—including those listed on the page that follows—in the archives available at www.icaa.cc. To learn how, check the box on page 43. 

Communication: ICAA's top 10

(in chronological order, most to least recent)

1. "When silence isn't golden"

Author: Jim Clemmer

JAA, July/August 2008

(Archives category: Communication)

To address lack of candor in the workplace, create safe environments for "courageous conversation."

2. "Shatter stereotypes of aging: how to help your clients create dynamic mature identities"

Author: Marilyn Larkin

JAA, March/April 2008

(Archives category: Communication)

Professionals can promote positive beliefs and attitudes about aging, and help clients become their best.

3. "Creating age-friendly websites"

Author: Brigid McHugh Sanner

JAA, July/August 2004

(Archives category: Communication)

A communications expert offers 10 rules to ensure websites meet the needs of silver surfers.

4. "Cultural approaches to promoting physical activity for older adults"

Author: Chaya Gordon

JAA, March/April 2004

(Archives category: Communication)

Successful programs are more likely when professionals understand a cultural community's characteristics and barriers to physical activity.

5. "Presenting to 50-plus audiences: a practical guide"

Author: Brigid McHugh Sanner

JAA, March/April 2004

(Archives category: Sales)

Commonsense advice points the way to presenting more effectively to older audiences.

6. "Are your educational materials missing the mark?"

Author: Brigid McHugh Sanner

JAA, July/August 2003

(Archives category: Health promotion)

Literacy level and design considerations are vital for print materials targeted to older adults.

7. "Six steps to age-friendly advertising"

Author: Colin Milner

JAA, May/June 2003

(Archives category: Marketing)

Age-friendly advertising uses messages that resonate with older adults, delivered in an authentic, compelling way.

8. "Make the brain your ally"

Author: Terry Ferebee Eckmann

Functional U, May 2003

(Archives category: Leadership)

Teaching techniques and theories inspired by brain research enhance clients' ability to learn.

9. "The invisible population"

Author: Marge Coalman

JAA, September/October 2002

(Archives category: Leadership)

Using practical advice and tips, professionals can overcome barriers and communicate better when training clients with dementia.

10. "Speaking their language"

Author: ICAA (based on AARP research)

JAA, January/February 2002

(Archives category: Communication)

AARP research offers important insights into communicating the message of physical activity to older adults.

How to access ICAA articles online

If you are an International Council on Active Aging® member, you can access content from ICAA publications through the archives available in the members only section of the association website. You can download (or view) entire issues of publications and newsletters in this section, or choose individual articles from the indexed library known as the "Articles archives." Here's how:

- Log in to the members only section of the ICAA website, www.icaa.cc, using your member number and password.
- Click on the "Article archives" portal.
- Review the list of categories that appears on the "Articles archives" webpage that comes up, then select a category to view and download individual articles on that topic.
- Go to the left-hand menu to choose entire publications or newsletters to review, and select the specific resource to see issues available.

A helpful preview of article categories and descriptions is available by clicking on the "Article archives" link on the ICAA home page or by going directly to www.icaa.cc/preview_membersection/articlearchives-master.htm. If you have questions or need help obtaining your member number and password, call ICAA toll-free at 866-335-9777.

The Summit at Central Park:

an innovative facility
engages active adults
in wellness

The City of Grand Prairie, Texas, reconceptualizes the senior center, opening a 'country club-level' venue for adults ages 50-plus

This is the seventh article in a series profiling the recipients of the 2010 ICAA Innovators Awards. Launched by the International Council on Active Aging® (ICAA) in 2003, these awards recognize creativity and excellence in active aging, honoring innovations that are leading the way, setting new standards and making a difference in the lives of older adults. These offerings target any or all of the seven dimensions of wellness—namely, physical, spiritual, intellectual, social, emotional, vocational and environmental wellness. ICAA supports professionals who develop wellness facilities, programs and services for adults ages 50 and over.

In Grand Prairie, Texas—a city of about 175,000, according to the 2010 United

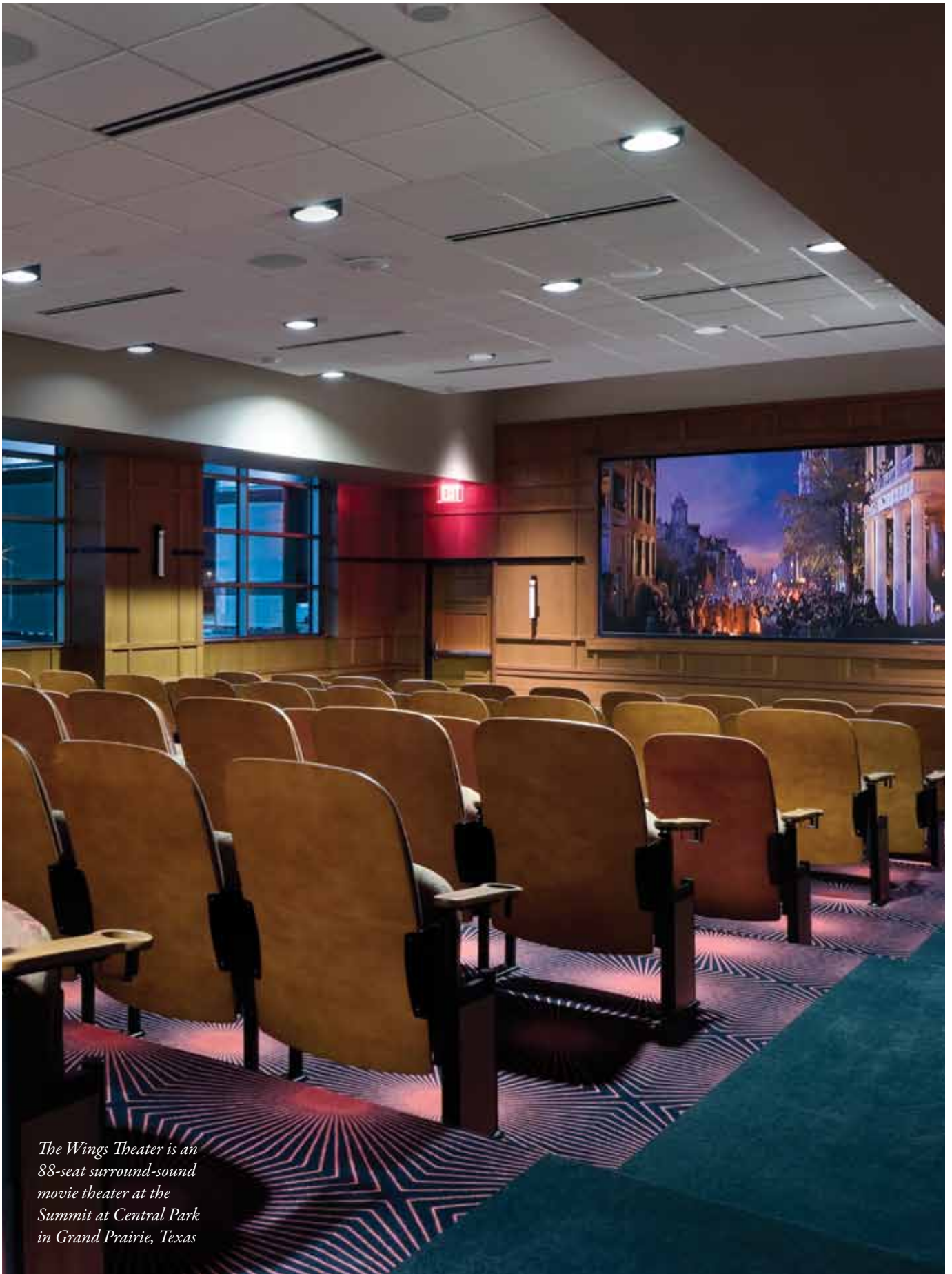
States Census¹—two population trends have gained momentum in the past couple of decades and slowly converged to transform the city. These trends are population growth and population aging.

Between 1987 and 2008, Grand Prairie's total population almost doubled (from 90,000 to 165,000), while the 55-plus age group increased from about 12,000 in 1990 to almost 44,000 in 2007. This older demographic is projected to expand further by 2015, to 63,000 adults.² City of Grand Prairie officials realized that the 8,000-sq.-ft. senior center, built in 1987, was inadequate in light of this growth and initiated what would be a years-long process to develop a new center.

Public forums and focus groups, combined with a series of facility visits,

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The Wings Theater is an 88-seat surround-sound movie theater at the Summit at Central Park in Grand Prairie, Texas

The Summit at Central Park: an innovative facility engages active adults in wellness

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When members of the Summit at Central Park first enter the active adult center, they walk into a large, two-story lobby with overstuffed leather furniture. Other features of the lobby include a player baby grand piano, a stone fireplace and a café

helped Grand Prairie officials and Parks and Recreation staff define a vision for the senior center that proposed something altogether new: a country club-inspired venue for the 50-plus crowd. On June 18, 2010, Grand Prairie officially opened the 56,000-sq.-ft., US\$23-million facility²—named the Summit at Central Park—which has since won multiple awards.

The Summit's objective "is to engage active adults within our community in a holistic approach to wellness and health, through an innovative facility and offering a broad range of program opportunities," says Center Manager Linda Long, of Grand Prairie Parks and Recreation. Membership figures show the community's response. Where the previous senior center had 600 active members, the Summit already has more than 5,000—100 of whom volunteer at the center.²

In creating the Summit, "the City of Grand Prairie was fortunate in a num-

ber of ways," comments Long. "These include a funding method, a passionate and involved City Council and Park Board, and citizens willing to accept a sales tax in support of the active adult center."

To learn more about the Summit, the *Journal on Active Aging*[®] recently asked Long to highlight aspects of the development journey and what center staff have discovered since the venue opened.

JAA: *How would you describe the Summit at Central Park?*

LL: The Summit at Central Park is a trendsetting, "country club-level," multifaceted community center for active adults ages 50-plus. The facility is designed and programmed to encompass the social, physical, spiritual, relational and entertainment needs of our community. In a nutshell, this is a building that no one wants to leave at the end of the day or evening.

Resource

Interested in learning more about how the City of Grand Prairie developed The Summit at Central Park? Check out the article "The Summit: How Grand Prairie created its 'country club for the 50-plus'" in the *ICAA Developer's Guide 2010*. International Council on Active Aging[®] members can access this article in the online "Articles archives" ("Facility development, changing the environment"), available in the members only section at www.icaa.cc.

JAA: *Please outline some of the amenities and elements that contribute to the Summit's country club feel and overall appeal to Grand Prairie's active adults.*

LL: The overall building is an impressive contemporary design. In the parking area, two multipassenger carts driven by volunteers pick up members at their cars and bring them to the entrance. Upon arrival, members enter the large lobby—fitted with oversized leather chairs—and are greeted by our friendly control-desk staff. The lobby also contains the Terrace Café, a bistro-style snack bar that offers breakfasts, snacks and lunches. The café serves a variety of drinks as well, including beer and wine.

The Summit was purposely designed to showcase the regional park surrounding it. Prominently located along a chain of lakes, with a 20-ft.-wide boardwalk, the center includes an outdoor terrace with grill, fireplace, covered patio tables, lounge furniture and games court.

Among the indoor amenities, the Wings Theater (named after a historic movie theater) is a state-of-the-art, 88-luxury-seat theater that shows recently run movies and can be used for presenta-

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When designing a wellness or fitness center for empty nesters, you better get to know some experienced bird watchers first.



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The Summit at Central Park: an innovative facility engages active adults in wellness

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Located in a 172-acre regional park, the 56,000-sq.-ft. Summit at Central Park overlooks a lake and surrounding boardwalk. The center makes use of thousands of feet of outdoor space for additional amenities and programming

tions and performances. The 4,000-sq.-ft. fitness area includes cardio and weight equipment specially designed for active adults. An indoor track floats over the gym and natatorium, providing expansive views of this indoor pool area and the surrounding park. And a dedicated room offers a variety of options for massage therapy, a popular request.

JAA: *How did the City of Grand Prairie come up with the concept for the Summit and develop it more fully over time? And what inspired officials and staff to create this new kind of senior center?*

LL: The Summit concept was born through an update of the City's Parks, Recreation and Open Space Master Plan, which identified a significant need to expand senior services due to a growing active-adult population. Staff began touring private and public facilities to evaluate trends in the industry. That research led to a paradigm in our understanding of active adults. Continuous focus group discussions throughout the design process built on those initial conceptual ideas.

A City Council budget retreat actually initiated action. At the retreat, council

members discussed the needs of Grand Prairie's older citizens and limitations at the existing center. They recognized that this population was both increasing and underserved. Mayor Charles England became passionately committed to the project and frequently attended our tours and meetings with the consultants.

JAA: *All projects encounter challenges. What key challenges did you encounter in developing a "senior center for tomorrow," as the Summit has been called? How did you address these challenges?*

LL: The initial challenge was breaking from the term *senior center*. This moniker limits the potential for expanded programs in the eyes of Boomers right through the aging population. We experienced adults in their 80s who said, "I will go to the center when I am old!"

A second challenge was the merging of a separated nutrition program. The group that met at the nutrition facility was established and unsure of this new project. Through continual focus group meetings, group members became comfortable with the proposed merger and the transition was very smooth.

A third challenge: *fees!* This is a typical "Don't talk about it, don't bring it up, and certainly don't enact one for seniors" issue, which creates an extreme challenge for municipal staff. A preliminary fee structure was developed by staff that protected the fixed-income members and assessed fees for specific upgraded programming and services. Again, continual discussions with groups combined with tours of the center during construction minimized the concerns, and fees were a nonissue at our grand opening.

JAA: *When the Summit opened its doors, staff were stretched to provide programming for the older "traditional" member and for the younger Boomer, as this required longer opening hours than at the city's previous center. What has the Summit's staff learned in the last 16 months about managing the demands of programming for all age groups?*

LL: Active adults of all ages are open to programming. Several classes have been developed to teach older members how to "social network," and the staff has also instituted "program centric" classes, where young and old merge. Instructors are sensitive to assisting those who need more specialized training.

When the Summit opened, the operating budget was fairly tight, and the sizable facility was managed by eight full-time staff. This challenge was immediately remedied by creating a volunteer program, which has surpassed all expectations. Nearly 100 active adults participate in a myriad of program opportunities, including driving multi-passenger carts, operating the Terrace Café, offering tours for prospective members, and a variety of other needed services.

JAA: *How did you reach out and encourage a sense of ownership in adults “from ages 50 to 100” prior to the Summit’s opening? How do you encourage continued ownership and participation today?*

LL: From the initiation of the project concept, the slogan, “This is *your center*,” was heavily utilized throughout our publications and community meetings.

Providing a ‘new generation’ senior center: five key steps

1. Engage your population. Listen, involve, communicate and remain in contact.
2. Select a consultant firm that is willing to work as a team member with constant feedback with staff.
3. Develop a holistic approach to programming your facility.
4. Develop your center in a community park rather than a stand-alone facility. This provides additional opportunities to comingle programming and offer expanded recreation.
5. Focus attention on inclusionary activities.

As soon as the Summit’s walls were up, tours of the space began in groups of 15–25 and occurred on a daily basis during construction. So people were able to visualize the rooms and space. Tour sizes increased the closer we got to completion, and a growing feeling of excitement continued through to the grand opening. Some prospective members had purchased memberships six months prior to opening and received extra savings and “goody” bags of gifts.

What we have found is the facility “sells” itself. In addition, existing members are so excited that they become tour guides for their friends and relatives. Frequently heard during these tours are comments like: “Don’t you wish you had this kind of facility?” or “Isn’t this a *wow* building?”—and another favorite, “Wait until you see the pool area!”

JAA: *How has the Summit grown or evolved since its opening? And how do you think the center will evolve in the years to come?*

LL: The Summit is the model of the future. A senior center should not be the “old folks” place, but a place to be revived daily.

Program opportunities continue to expand. Organizations and professional associations that emphasize older populations want to be a part of the facility. And the staff continues to program activities from an inclusionary aspect, which eliminates the isolationism of different aging segments.

JAA: *Have there been any unexpected challenges and/or opportunities in operating the Summit that have impacted what you offer or how you do things?*

LL: The fitness area has been very popular, so the staff added more strength equipment. Also, we have experienced an increase in rentals, including wedding receptions, school reunions and anniver-



The Summit at Central Park has hosted several musical concerts on its grounds since the venue’s official opening in June 2010

sary parties. It has been challenging to determine time slots for rentals to avoid conflicts with existing programs, but the revenue stream has been a benefit.

Our more “traditional” members, who previously were involved in a single activity, have become involved in other programs, extending the hours that they remain at the Summit. This has enhanced the intergenerational bonding of members.

The commitment and support from our active-adult volunteers has significantly enhanced our facility, too. As mentioned previously, more than 100 volunteers are involved in a number of programs and activities.

JAA: *How do you believe the Summit advances healthier, more vital aging in Grand Prairie?*

LL: The Summit has become a one-stop facility for fitness, recreation and social opportunities for active adults. An emphasis is placed on wellness pro-

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The Summit at Central Park: an innovative facility engages active adults in wellness

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Among its features, the Summit at Central Park includes a covered terrace with grill, fireplace, patio tables and lounge furniture. Elements such as these allow members to spend more time outdoors and maximize their enjoyment of the facility's natural setting.

gramming. Members can purchase (for a small fee) a wellness key that automatically retains their workout information, plus each member receives weekly updates of their progress and important nutrition and fitness emails.

“Summit Success Stories” was initiated by the staff to showcase and honor adults who have made significant advances in their physical abilities or medical conditions. This popular program has continued to expand. Medical organizations and physicians contact us to offer presentations on different aspects of wellness for this program.

JAA: *Finally, in a broader context, what does the Summit bring to the City of Grand Prairie and to the overall community today?*

LL: The Summit and its programs have made a difference to Grand Prairie economically. A number of adults now reaching or past retirement age have reconsidered thoughts to leave the city and retire in other areas because the facility is now available.

In addition, the Summit anchors the initial phase of a multimillion-dollar regional park development at Central Park. As such, the center has set the design standard and level of quality for future development of an amphitheater, trail system, regional playground, and community recreation center with indoor aquatics facility. The City of Grand Prairie is also investigating possible retail and housing opportunities within the Central Park site.

Most importantly, the Summit illustrates that Grand Prairie cares about its

citizens. We recognize the value of our active-adult population as well as their changing needs. *W*

The Journal on Active Aging thanks Linda Long, Tim Shinogle, Rick Herold and Danny Boykin, of the City of Grand Prairie, for their help with this article. For more information about Grand Prairie Parks and Recreation, visit www.grandfunp.com.

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2. Milner, J. (2010). The Summit: How Grand Prairie created its “country club for the 50-plus.” *ICAA Developer's Guide 2010*, 5, 10–20.

Images courtesy of the City of Grand Prairie

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Sarcopenia:

what it is
(and is not)
and how to
deal with it

Sarcopenia is a significant health issue in the older-adult population, especially as people advance in years. Interventions can help mitigate losses associated with this condition

by Alexandra Williams, MA

Operational definition of sarcopenia—Progressive decline in skeletal muscle mass ... that may lead to decreased strength and functionality.¹ From the Greek, meaning “flesh loss” or “poverty of flesh.”

Although many adults may not know the definition of *sarcopenia*, they certainly know its effects, as this loss of

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Sarcopenia: what it is (and is not) and how to deal with it

Continued from page 54

Resources

Health Canada: Natural Health Products

www.hc-sc.gc.ca/dhp-mps/prod_natur/index-eng.php

US Department of Agriculture, National Agricultural Library, Food and Nutrition Information Center: Dietary Supplements: Resources for Professionals

www.nal.usda.gov/fnic/pubs/bibs/gen/dietarysupplementsprofessionals.pdf

US Department of Health and Human Services, National Institutes of Health, National Center for Complementary and Alternative Medicine: Dietary and Herbal Supplements

www.nccam.nih.gov/health/supplements

muscle function and strength can lead to a significantly decreased quality of life or even death. Falls and fractures, impaired mobility, decreased ability to perform tasks of daily living, and a loss of independence are all associated with sarcopenic declines.

Determining cause: age or lifestyle?

Long linked with the aging process, there is much evidence that sarcopenia *could* be a geriatric syndrome. Some of the other contributing factors could be early-life developmental influences, substandard diet, sedentary lifestyle, chronic diseases or even certain drug treatments. However, as the cause of sarcopenia has not yet been fully identified, the discussion about whether it's due to aging, or merely a correlative, is still ongoing. This is an important distinction. If sarcopenia is inevitable, the treatment (or lack of it) will have a different focus than if it's simply correlated, and therefore possibly preventable.

Loss of muscle fibers begins with the loss of motor neurons as people age. These cells “control essential voluntary muscle activity such as speaking, walking, breathing, and swallowing,” explains the National Institute of Neurological Disorders and Stroke, one of America's National Institutes of Health.² When the motor neurons die, the muscle fibers die. As the motor unit fails, it may innervate (connect with) adjacent slow-twitch muscle fibers, which produce less force than fast twitch, are slower to contract, and are smaller. Balance and movement speed become impaired as this process occurs.

According to Roubenoff and Castaneda,³ sarcopenia is “not a disease but rather refers specifically to the universal, involuntary decline in lean body mass that occurs with age ... The loss of lean body mass reduces function, and loss of approximately 40% of lean body mass is fatal.” Roubenoff⁴ further states that aging *causes* sarcopenia, and that costs in the United States are over US\$18 billion per year. While some muscle mass declines are seen as early as the fourth or fifth decade, particularly in sedentary people, overt sarcopenia is seen in 5–10% of those in their 60s, and climbs to over 50% in those over 80. Essentially, it appears that if you live long enough, you'll develop it.

The good news is that sarcopenia can probably be both inevitable *and* mitigated. In studies by Fiatarone and colleagues published in 1990 and 1994, and later discussed by team member William Evans, PhD,⁵ a high-intensity resistance-training regimen resulted in “significant gains in strength and functional status” for frail, older adults living in long-term care. This type of exercise “may minimize or reverse the syndrome of physical frailty,” Evans writes in his paper.⁵ He adds that “there is no segment of the population that can benefit more from exercise training than [older adults].”

Pressing challenges

Loss of muscle function and strength are not the only challenges. Some of the less obvious, yet insidious issues seen with sarcopenia in older people are dehydration, nutritional stress, rapid unintentional weight loss⁶ and loss of testosterone.⁷

On the other end of the weight spectrum is obesity, which is one of the 2 greatest epidemiological trends today (the other being an aging population).⁴ An important distinction to make is between *muscle* loss and *weight* loss—someone can appear healthy or of “normal” size, yet be obese and sarcopenic. This is referred to as sarcopenic obesity. A person with this diagnosis is at a double disadvantage: Weakness increases due to the loss of muscle mass, while the need to carry greater weight increases from the excess fat. As Roubenoff puts it, “Ironically, although weight gain causes an increase in lean mass as well as fat mass, obesity in [older adults] acts synergistically with sarcopenia to maximize disability.”⁴ Villareal et al.⁸ determined that obese elders were as severely impacted as nonobese frail elders for functional performance, aerobic capacity, strength, balance and walking speed.

Besides these quality-of-life issues, being “skinny fat” has biological implications that create a negative cycle. As physical activity falls, its muscle-sustaining (trophic) effect diminishes. This loss of muscle reduces the mass of available insulin-responsive target tissue (which removes excess glucose in the bloodstream and stabilizes blood sugar levels), thereby encouraging insulin resistance. The body's less effective use of insulin, in turn, promotes obesity and the metabolic syndrome,⁴ a group of risk factors tied to heart disease, diabetes and stroke.⁹ Insulin resistance also potentially has a direct destructive (catabolic) effect on muscle.⁴ As the amount of fat increases, “marbling”—the infiltration of fat into the muscle—occurs, lowering both muscular quality and work performance. In time

the impact of changing muscle composition and declining muscle mass becomes more evident.

Stages and treatments

Although sarcopenia is categorized as either primary (age-related only, with no other cause evident) or secondary (one or more causes), this condition is not easy to characterize in older adults due to multiple factors that may predispose individuals to develop it. Within these categories, however, there are 3 stages:¹

- presarcopenia—decrease in muscle mass
- sarcopenia—decrease in muscle mass, and muscle strength *or* performance
- severe sarcopenia—decrease in muscle mass, muscle strength, *and* performance

For active-aging professionals looking for ways to help clients prevent or slow the decreased function and quality of life that occurs with sarcopenia, established options include exercise, supplementation and dietary modifications. [Ed. Professionals are encouraged to keep scope of practice in mind and refer clients when necessary, as well as to seek expert advice about the use of supplements. Please see the sidebar on this page.]

Exercise

Exercise is an obvious choice, especially strength training. More specifically, strength training that emphasizes growth in fast-twitch muscle fibers¹⁰—and perhaps even power training.

In 2009, Rice and Keogh¹¹ did a review to determine if power training was better than standard strength training at improving functional performance in older adults. “Of the 12 eligible studies identified, 9 also included a strength-training group,” the authors write. “Virtually all studies reported significant increases in strength and power for the strength- and power-training groups.

Significant improvements in functional performance were observed for the power-training groups in 10 of the 12 studies, and in the strength-training group in 4 of the 9 studies. These results,” they state, “... suggest that power training may be more effective than strength training in this regard.”

Rice and Keogh go on to make practical application suggestions that include a preparatory conditioning phase of approximately 2 weeks in which “muscular strength and endurance as well as technique and confidence are emphasized.” They further suggest 2–3 weekly sessions, with one to 2 sets of 10–12 repetitions using moderately light loads (40–70% 1RM, or repetition maximum).

For the power-training phase, the authors recommend a similar frequency, yet make an intriguing point about intent. “A variety of loads (i.e., 35–75% 1RM) may be effectively used in the power phase, as long as the *intention* is to maximize the velocity of the concentric [muscle-shortening] phase.” The number of recommended sets is one to 3, with a fast (less than one second) concentric phase and a slower (2–3 second) eccentric, or muscle-lengthening, phase. The fact that *intent to lift* a heavy (for that person) weight activates the fast twitch fibers should motivate clients, as they will feel successful even if they can’t lift the weight. It’s also important for individuals to work on a stable surface as that will activate more muscle fibers than an unstable surface, plus engender trust in those concerned about balance and falls.

Dietary modifications

The most important dietary modification, according to researchers, is to add more protein. In a study published in 2010,¹² Evans notes that an imbalance between the rate of muscle protein

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A note from the editor: supplementation and older adults

Given the profusion of herbal and dietary supplements promoted by the anti-aging industry, the range of claims (often unsubstantiated) that accompany them, and the lack of solid scientific research available on some supplements, the *Journal on Active Aging*[®] has generally avoided the topic of supplementation to date. Do supplements have a legitimate role in improving health and function in older adults? Absolutely. But which supplements and for what purposes, and with whom—and when might they cause harm? Some supplements, such as calcium and vitamin D, receive considerable attention from researchers; others are hardly studied. There are so many unanswered questions.

Recognizing there will be a range of knowledge on this topic among *Journal* readers—professionals who look to our publication for credible information and advice—we have decided to publish this article’s section on supplementation as a possible starting point for further investigation. As the author outlines, some studies suggest positive outcomes on muscle-related factors in older adults with specific supplements. These findings offer a few building blocks for those readers who want to begin, or continue, to create clarity on this topic from a very confusing picture. We do not endorse the use of supplements without expert advice.

Jenifer Milner, Editor-in-Chief
Journal on Active Aging[®]

Sarcopenia: what it is (and is not) and how to deal with it

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synthesis and degradation leads to the loss of skeletal muscle protein. People need sufficient protein in their diets for muscle protein synthesis, and maintenance of muscle mass and function, to occur. Symons et al.¹³ found that a moderate 113-gram serving of lean beef (30 grams protein) increased muscle protein synthesis by approximately 50% in both younger and older test participants. The researchers also discovered that more than 30 grams of protein in a single meal doesn't further enhance the stimulation of muscle protein synthesis. Based on this information, the authors suggest

advising clients to have 25–30 grams of protein with every meal.

At present, the Recommended Dietary Allowance (RDA) for protein in adults is 0.8 grams per kilogram of body weight (g/kg bw) per day; there are no established criteria specifically for older adults. This is the minimal level, however, and Paddon-Jones and Rasmussen¹⁴ propose 1.0–1.5 g/kg bw per day. Some common sources of protein are Greek yogurt, cheese, peanut butter, eggs, almond butter, hummus, and bean soup. Several suggested foods with their protein counts are listed in Table 1 on this page.

Table 1. Suggested sources of protein

1 ounce meat = 7 grams protein
8 ounces milk = 8 grams protein
1 slice of bread = 3 grams protein
1 egg = 7 grams protein
1 vegetable serving the size of the palm of the hand = 2 grams protein

Source: Robert Anding, MS, RD/LD, CDE, CSSD, director of sports nutrition, Texas Children's Hospital, and national spokesperson, American Dietetic Association

Supplementation

In an attempt to focus on the role of protein in preserving skeletal muscle in older adults, Paddon-Jones and Rasmussen¹⁴ note that at present 15–38% of men and 27–41% of women who are over age 60 eat less than 75% of the RDA for this nutrient. So getting older adults to increase their protein intake simply through diet may not be realistic.

With this in mind, the study authors suggest a combination of protein and supplements. One caveat: Clients should be cautioned not to substitute food with supplements, particularly because in some instances these products increase satiety and replace “voluntary ingestion of regular menu items.” And supplements tend to cost more than food, which could be a major deterrent for anyone on a fixed income. (The efficacy of protein supplementation can also be limited for those with medical complications such as impaired kidney function or dysphagia [trouble swallowing].)

The first suggested supplement is leucine, an amino acid. Per Paddon-Jones and Rasmussen,¹⁴ “... the addition of supplemental leucine to normal mixed nutrient meals may improve or normalize muscle protein synthesis in aging muscle.”


The next supplement is vitamin D. In 1985, MacLaughlin and Holick¹⁵ published an article that showed the capacity of human skin to produce vitamin D₃ decreased with age. Dehydration, already common in older adults, further affects the body's ability to produce and synthesize sufficient vitamin D. Last year, Zhu and colleagues concluded that vitamin D supplementation was "observed to increase muscle function in those who were the weakest and slowest at baseline," and should be given to people with insufficient or deficient muscle strength and mobility.¹⁶

The final supplement shown to be helpful for older adults is creatine, another amino acid. Studies by Chrusch et al.¹⁷ and Tarnopolsky et al.¹⁸ demonstrated significant increases in maximal strength following creatine supplementation combined with resistance training. Chrusch's team assessed 1RM for leg press, knee extension and bench press, and found that those who took creatine supplements had increases in strength, endurance and power. Getting similar results, Tarnopolsky and colleagues confirmed that "a combination of creatine monohydrate and conjugated linoleic acid can enhance some of the beneficial effects of training."

Keep in mind that all the researchers recommended a combination of supplementation and exercise.

Implications for professionals

Depending on scope of practice and experience, professionals who work with older adults should explore combining interventions as a way to mitigate the effects of sarcopenia. For example, fitness specialists could team up with dietitians to create a diet and exercise plan. Or physical therapists might arrange with a local health club to assess body composition using an air displacement device, which would help separate clients with sarcopenic obesity from those with low body fat and weight.

Sarcopenia is a significant health issue in the older-adult population, especially as people advance in years. Active-aging professionals can help clients prevent or slow declines in muscle mass, as well as enhance muscle function and strength, by developing interventions that best suit people's needs, abilities and potential. 

Alexandra Williams, MA, has been writing, teaching, speaking and editing in the fitness industry for over 25 years. Williams is currently employed at the University of California, Santa Barbara, in the Exercise Sports Studies and Recreation department, and is the co-owner of Fun and Fit, a business that combines researched fitness advice with humor. She can be reached at info@funandfit.org.

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ICAA honors

eight innovative efforts
that advance active aging



Cutting-edge programs, products and environments support healthier, more vital living for people ages 50 and beyond—and send an important message

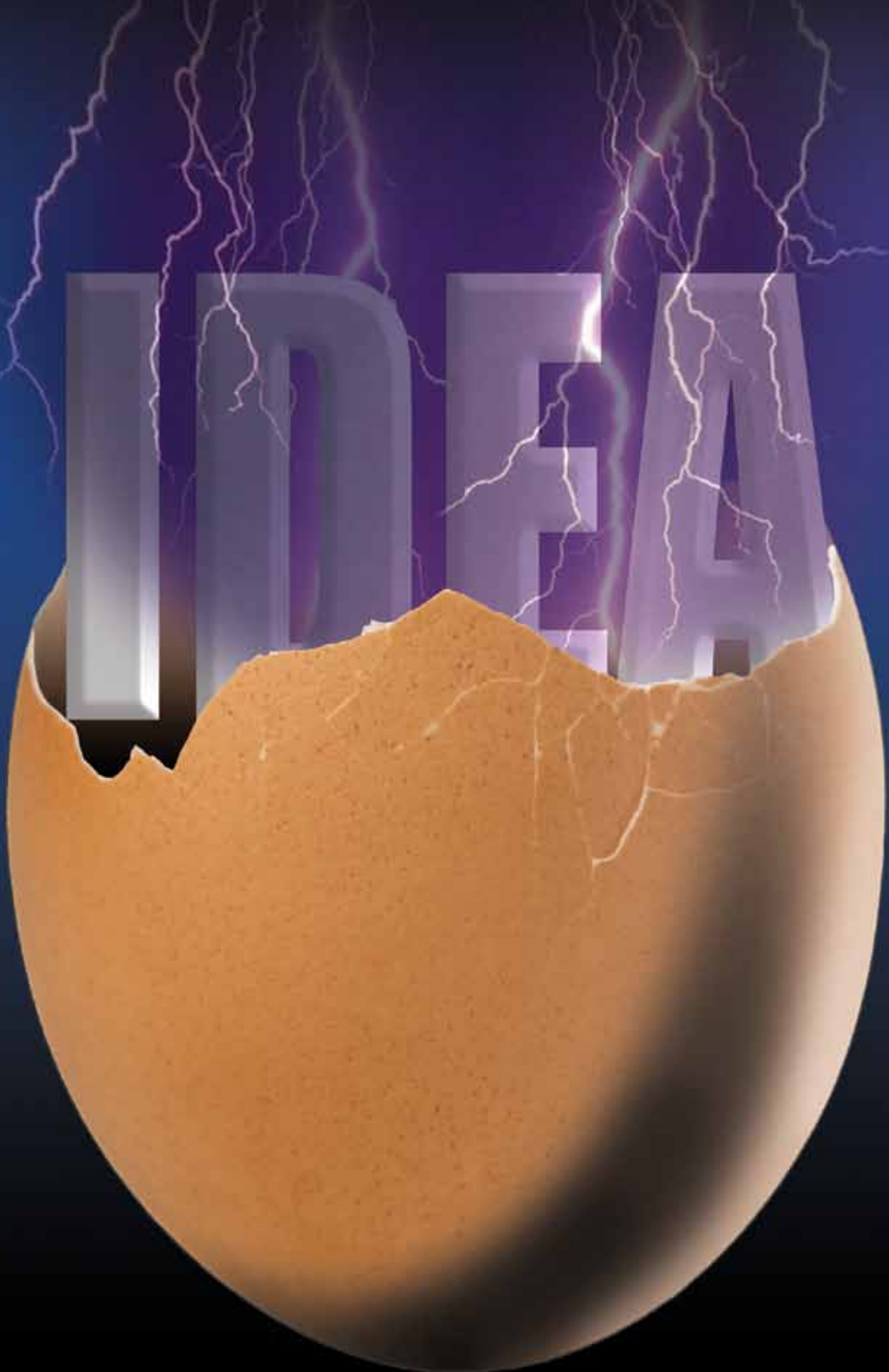
The International Council on Active Aging® (ICAA) began with an innovative idea: Create an industry dedicated to better health, wellness and quality of life for adults over 50 by uniting professionals across sectors who also share this goal. Launched in 2001, ICAA today leads, connects and defines this industry—the active-aging industry—made up of like-minded professionals and organizations that develop wellness facilities, programs and services for the older population. Active-aging devotees combine creativity, positive energy, and a passionate commitment to older-adult wellness to advance this movement. And by providing ongoing opportunities for clients to be more active and to learn, grow and participate in their communities, these professionals and organizations support the 50-plus population in living well.

To recognize creativity and excellence in active aging, and highlight cutting-edge efforts, ICAA established an awards program in 2003. Every year the ICAA Innovators Awards honor innovations that are leading the way, setting new standards and making a difference in the lives of older adults. Award-winners target any or all of the wellness dimensions promoted by the association—namely, social, emotional, vocational, spiritual, intellectual, physical and environmental wellness.

ICAA presents its annual awards in the following three categories:

- **ICAA Innovators Award**, for wellness programs, travel services, health promotion and marketing campaigns, and education programs that have improved wellness for older adults;
- **ICAA Innovative Solutions Award**, for North America's most creative wellness products and services for active older adults; and

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ICAA honors eight innovative efforts that advance active aging

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- **ICAA Green Award**, for organizations that encourage environmental stewardship by creating and/or implementing eco-friendly products, services, processes, designs or programs in their communities.

The winners of the Ninth Annual ICAA Innovators Awards were announced this fall and crystal awards of recognition given to recipients at the ICAA Conference 2011 in early December. In-depth profiles of individual award-winners will appear in issues of the *Journal on Active Aging*® throughout 2012. Meanwhile, introductory snapshots are available on the following pages.

“The 2011 ICAA Innovators are excellent examples of the creative programs, products and environments generated in the active-aging industry to enhance health and well-being for age 50-plus adults,” comments Colin Milner, the association’s founder and CEO. “On behalf of ICAA, I congratulate everyone behind these efforts, and thank all those who entered this year’s awards competition.” ICAA learned about many excellent programs, facilities and outreach for older adults, he adds, encouraging those who did not receive an award this year to submit an entry in 2012.

Efforts to support healthier, more vital aging send an important message, stresses Milner. “With the right support and environments, people can live as fully as possible throughout the life span—that’s important to know in a world that overwhelmingly views population aging as a challenge. If people stop looking at older adults through a lens of decline and diminished value,” he says, “they will see the vast untapped potential of these individuals and realize that population aging is an opportunity as well.”

Online application forms for the 2012 ICAA Innovators Awards will be available on the association website in late May

for those interested in entering next year’s awards competition. To learn more about the Innovators awards program, call ICAA toll-free at 866-335-9777, or visit www.icaa.cc/awardsprogram.htm.

Snapshots of the 2011 ICAA Innovators

ICAA INNOVATORS AWARD WINNERS

Brain Health University Senior Lifestyle Corporation Chicago, Illinois



Founded in 1985, Senior Lifestyle Corporation (SLC) develops, owns and operates seniors housing to meet the needs of people at various economic and care levels in the United States. The Chicago, Illinois-based organization implements programs in its communities to help older adults enjoy healthier, more fulfilling lives. These offerings include the newly launched Brain Health University (BHU). This program is based upon a previous SLC program, “Cerebral Celebration—Kick-off a community based brain healthy lifestyle,” which raised awareness that individuals “can and do participate in their own brain health and functioning,” says Terry Fay, corporate director of resident programs. BHU is the organization’s next step. The program—a collaborative effort spread across 70 SLC communities in 19 states—“provides residents with op-

portunities to learn, experience brain health activities and socialize, resulting in enhanced lives and a strong sense of personal well-being,” Fay explains.

With its 60-day schedule and curriculum of 30 classes, BHU aims to immerse Senior Lifestyle residents in the brain-stimulating experience of novelty, variety and challenge. Courses parallel college credit classes, according to Fay. The program includes “class descriptions, registering to complete the certificate, collecting class handouts ..., overall participation, homework and, lastly, a formal graduation for all who attended their class loads, complete with a ceremony and diploma.” Noting that BHU “has been successful in all communities under the Senior Lifestyle umbrella,” Fay adds that “feedback from residents has been so positive that we are rolling out semester two in the spring of 2012.”

Taste of America Asbury~Solomons Island Solomons, Maryland



An affiliate of Asbury Communities in Germantown, Maryland, Asbury~Solomons Island is a nonprofit continuing care retirement community located in Solomons, a popular weekend getaway on the Patuxent River. Asbury~Solomons Island promises older adults “a lifestyle of choice and flexibility ...” on the 58-acre waterfront property. “Here at Asbury~Solomons Island, we believe it is important to introduce

Criteria for the ICAA Innovators Awards

The winners of the 2011 ICAA Innovators Awards were selected based on the following five criteria:

Innovative. Is the program/initiative/plan different than what is currently being done in the field? Or, does it take a standard procedure and add an interesting new angle?

Pervasive. Did the program/initiative/plan expand into a comprehensive approach that engaged an entire organization or community?

Ambitious. Does the program/initiative/plan break new ground, achieve a stretch goal or represent a paradigm shift?

Measurable. Are there specific actions, numbers or other measures that demonstrate success?

Dazzling. Did the application contain information that is so unique or powerful that the judges respond with great appreciation?

topics/events that allow our residents to continually have new experiences and to be lifelong learners,” states Dennis Poremski, the community’s wellness director. “One of the ways we accomplished that this year was through our new series called ‘Taste of America.’”

According to Poremski, the Taste of America program involves picking a region of the United States and featuring that area through an experiential dining event. Participants experience a journey that includes “the tastes and smells of native cuisine, visual décor from the region, listening to the local music, and [immersing] themselves in facts and history

relating to the themed topic.” A New England clambake and a Southern bar-becue are examples of past events.

Taste of America was “started as part of our community’s 15th Anniversary Celebration,” comments Poremski, who adds that residents have pleaded for the program to continue once the anniversary is over. “It has been wonderful because [w]e have reached into corners of our community and engaged residents who we haven’t seen before,” he says. The program has “also aided in our deliberate campaign to incorporate fun, meaningful, multidimensional, cultural events into our ... six dimensional wellness program.”

Live and Learn The Mayflower Winter Park, Florida



“The Mayflower Retirement Community in Winter Park, Florida, has always embraced ‘continuing education’ ...,” mentions Wellness Coordinator Elyse Baclar. Programs at the Central Florida continuing care retirement community have ranged from “a political ‘think tank’ to foreign language classes to an on-site chapter of Toastmasters,” Baclar says. Recently, however, The Mayflower formed a partnership with a nearby private liberal arts school, Rollins College, with the goal of taking lifelong learning to the next level. Focusing on interactive, intergenerational programming, the collaborators developed “a pilot ‘enrichment series’ that was first implemented in the spring of 2010 and con-

tinues to expand and thrive.” This series, called Live and Learn, “features relevant, hands-on learning experiences in small-group sessions with no more than 12 participants,” Baclar continues. Rollins faculty and staff teach these classes, which “cover subjects ranging from art, theater and writing, to history, physics and environmental sciences.”

The partners constantly assess the Live and Learn program, which has evolved over time based on what works, observes Mayflower Marketing Director (and Rollins alumna) Jana Ricci. The series, which launched with two four-hour workshops, now features 10 courses. And the curriculum is custom-tailored to meet the needs of both Mayflower residents and Rollins students.

Ricci believes that “the Rollins/ Mayflower partnership differs from other retirement community/university affiliations because of its focus on immersion in the subject matter, interactivity and a small teacher-to-student ratio.” She adds, “This is truly an inclusive partnership intended to engage older adults in learning and it has totally revitalized our brain fitness initiative.”

Man Cave Atria Woodbridge Irvine, California



Headquartered in Louisville, Kentucky, Atria Senior Living owns and operates more than 125 communities in 27 US

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ICAA honors eight innovative efforts that advance active aging

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states. Atria Woodbridge in Irvine, California, offers independent and assisted living options for older adults, along with a commitment to providing residents with an environment that helps them thrive. Atria's Engage Life program supports that commitment with activities to help individuals continue to lead fulfilling lives. Interestingly, though, the most popular wellness program at Atria Woodbridge today began with a resident's secret hobby, according to Jessica Houck, the community's Engage Life director.

"When one thinks of a 'wellness program' at a senior living community, the idea of a space where gentlemen get together to think, plan and create everything from model planes to robots does not typically come to mind," says Houck. Yet, the Man Cave (as the program is called) grew out of a resident's efforts to enhance and overhaul the small, existing men's club. In a spare room, this individual started craft projects, "including model planes, a horse racing game ..., and motorized racing land yachts for everyone to enjoy." Eventually, he invited others to participate—"and that is how the Man Cave was born." Residents create blueprints and project plans to develop working machines and new creations, with "the finished projects enjoyed by residents, staff and family alike," Houck notes. Engage Life activities that include these completed projects become instant favorites, she adds, "drawing the community together and giving the residents hours of education and creativity in a fun, social atmosphere."

Somerby Tail-Wagger Treats Somerby Senior Living Birmingham, Alabama



A wholly owned subsidiary of Dominion Partners, headquartered in Birmingham, Alabama, Somerby Senior Living seeks to inspire and nurture successful and active aging at all levels of care every day. In early summer 2011, Somerby launched an initiative initially intended to enhance wellness for its memory care residents. This program, called Somerby Tail-Wagger Treats, soon blossomed into something much bigger, attracting independent and assisted living residents who also wanted to participate. The Tail-Wagger Treats program brings together Somerby residents with local Boy Scouts of America troops and other local volunteer groups "to mix, mold and bake literally thousands of dog biscuits [which] they ... distribute to the animals in local area shelters," says Somerby's vice president, Stovall Kendrick. The initial goal—to "make and bake 5,000 dog biscuits" by year's end—was quickly surpassed, he notes, with 10,000 biscuits achieved by mid-August.

Somerby residents from all care levels "work their minds by preparing the biscuit recipe and by teaching the Scouts, volunteers, and each other elements of cooking," explains Kendrick. These individuals work their bodies, he adds, as they create, bake and package the dog biscuits. They also enjoy the love and attention shared with the animals—"both those they pet, play with, and feed at the Tail-Wagger Treats headquarters and those they can spend time with when

they deliver their biscuits to the recipient animal shelters." Participants in the Somerby Tail-Wagger Treats program also share a common purpose, according to Kendrick, "buoyed in the spirit of giving back to the community while having fun."

ICAA GREEN AWARD WINNERS

Grand Lake Gardens Oakland, California



Anthropologist Margaret Mead once said, "Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has." In Oakland, California, the Grand Lake Gardens continuing care retirement community "is a shining example of a small group of committed older adults changing the world, and making it a little greener along the way," says Executive Director Adnan Hasan. Opened in the mid-1960s, the American Baptist Homes of the West campus is home to just 90 older adults. But a community garden created in Grand Lake's "Upper Acre" has provided more than 800 lbs. of fresh, local and organic produce since spring 2010, feeding 900 impoverished older adults weekly at the nearby St. Mary's Center.

Members of Grand Lake's Green Committee initiated this project when, bothered by the once-empty plot of land, they questioned how it could help feed Oakland's hungry. There were many barriers to the envisioned community gar-

den, Hasan observes, including “already stretched” employees and a lack of funds to facilitate the effort, plus “a small area of hard pan dirt, ... no way to haul soil, and nowhere to plant” the garden. Persevering, the community overcame these obstacles with its “can-do” spirit.

Through a grant from Rebuilding Together Oakland, a local affiliate of the national nonprofit that partners volunteers and donors with worthy projects, Grand Lake Gardens built its community garden with assistance from the Piedmont Community Service Group. Grand Lake gardeners have now sustained the project through its second summer—“a measure of success all on its own,” according to Hasan.

Timber Ridge at Talus Issaquah, Washington



Situated at the base of Cougar Mountain in the Issaquah Alps and surrounded by evergreen forests, Timber Ridge at Talus is a Life Care Services community in Issaquah, Washington, a fast-growing suburb of Seattle. In 2008 Timber Ridge opened its doors as “the first LEED (Leadership in Energy and Environmental Design) certified senior living community in the United States,” notes the community’s executive director, Scott Doherty. “Timber Ridge achieved Silver Certification based on a comprehensive New Construction Rating System measuring sustainable site development, water efficiency, energy and atmosphere optimization, materials and resources,

indoor environmental quality, and innovation and design process,” he explains.

As part of its commitment to green initiatives, Timber Ridge has initiated a variety of green stewardship programs in the years since its opening. The community continues to research additional initiatives “to operate more efficiently, effectively and, most importantly, sustainably,” Doherty says. Current programs and projects include, among others, an eco-ware containers service that promotes greener practices, reduces waste and saves an estimated US\$30,000–40,000 per year; a newspaper recycling system that supports a local nonprofit that helps people with disabilities work in their communities; a cardboard baler to assist in the recycling of a projected 850–1,700 lbs. of cardboard weekly; and food waste and paper composting estimated to have diverted 55 tons of garbage from the local landfill. Doherty concludes, “The success of the programs can be measured environmentally, financially, through resident feedback, and improved operations.”

ICAA INNOVATIVE SOLUTIONS AWARD WINNER

Step360 Pro SPRI Products, Inc. Libertyville, Illinois



SPRI Products, a GAIAM company, has distributed rubberized resistance exercise products, fitness accessories

and exercise education programs for the health and fitness industry for 28 years. Headquartered in Libertyville, Illinois, the company prides itself on what it calls “a tradition of innovative product designs that transform exercise.” The Step360 Pro is a recent addition to SPRI’s offerings.

The Step 360, by SPRI, provides a gentle, flat-platform training surface atop two circular, air-filled chambers, which allow the platform to move. This movement challenges balance during exercise to enhance functional stability. For safety, the independent, inflatable chambers also allow for modification of the platform height and degree of balance challenge. A generously sized platform enables individuals to adopt a wider, more stable stance on the Step360 Pro, says Adam Zwyer, SPRI’s director of marketing and operations. The durable, nonslip surface further encourages user confidence when performing more demanding movements. “The platform’s contrasting color, texture and outer rim provide safe and proper foot placement while getting on and off,” Zwyer points out.

Among adults ages 65 and older, falls are both the leading cause of injury deaths and the most common cause of nonfatal injuries and hospital admissions, according to the US Centers for Disease Control and Prevention. The Step360 Pro’s “flat-surface 360-degree balance challenge prepares the body for [the] off-center neuromuscular reactivity so important for fall prevention,” Zwyer explains. The product “provides a training experience performed on a surface similar to ... the ground-based surface upon which activities of daily living are performed, thus creating a high transference of training benefit to movement of daily life.”

Whole body vibration, part two:

what's the most effective protocol?

Discover what the scientific literature shows about the effectiveness of different whole-body vibration platforms and protocols on specific physical performance measures for aging well

by Joseph Signorile, PhD

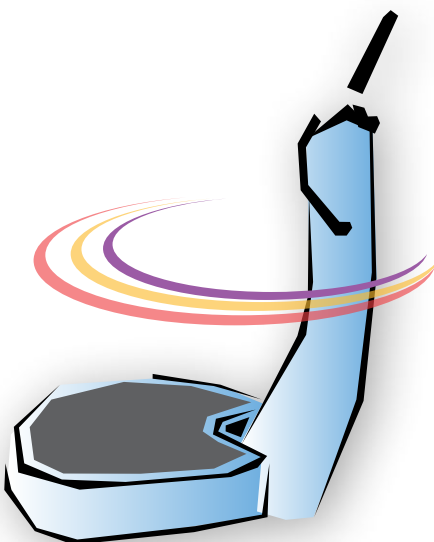
This is the second installment of a 2-part article about whole body vibration in this year's Journal on Active Aging®. Part one, published in the September/October issue, examined findings related to physical performance factors that affect successful aging. In this issue, the author reviews findings related to various protocols.

For any exercise device or intervention to be effective, it must be used correctly. This may seem a simple concept, but its application can be difficult. It may also take years to develop all the questions

concerning the most effective protocols. Given the number of whole body vibration (WBV) devices, the available settings on each device, and the number of different exercises and patterns of training that you can use with WBV, the question should not be, What is the best protocol? Rather, we should be asking, What is the best protocol to improve a given parameter—strength, power, balance, etc.—in older adults and on what type of machine? (To learn more about whole body vibration itself and its impact on physical performance factors, see the articles noted in the “Resources” sidebar on page 71.)

In addition, traditional training techniques may be more effective in addressing some performance parameters, while WBV training may be more effective in improving others. An example is seen in the work of Raimundo, Gusi and

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Whole body vibration, part two: what's the most effective protocol?

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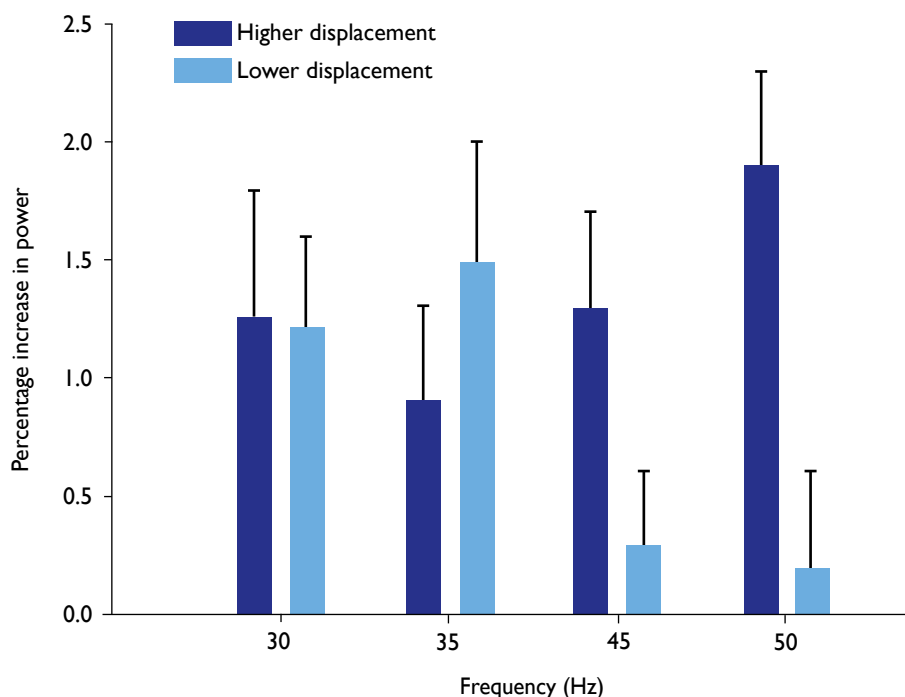


Figure 7. Improvements in power with a single bout of WBV showing the link between higher frequencies and higher displacements and lower frequencies and lower displacements. After data from Adams, J. B., Edwards, D., Serravite, D. H., et al. Optimal frequency, displacement, duration and recovery patterns to maximize power output following acute whole body vibration. *Journal of Strength and Conditioning Research*, 23(1), 237–245, 2009.

Tomas-Caru.⁴² In 2009, these researchers reported greater improvements in 4-m maximum walking speed and chair rise testing among participants as a result of 60 minutes of walking at 70–75% HRmax (maximum heart rate), while centrally pivoting WBV (one-minute 1:1 work:recovery; 10–15 minutes) produced greater increases in power as measured by vertical jump. (Refer to the box on page 69 for a list of the three kinds of whole body vibration machines and the vibrations they provide.)

Trans and colleagues reported similar “split results” when examining the impact of a stable WBV platform and a uniquely designed platform (featuring a balance board with a built-in vibratory system) on knee strength and proprioception in women ages 60–70 years with knee osteoporosis. The same training protocols were used on both platforms,

applying static lower-body exercise that progressed from six 30-second repetitions at 25 Hz to nine 70-second repetitions at 30 Hz. The work:recovery ratios for all training were 1:1. Training on the stable platform increased muscle strength, the researchers reported, while the balance board platform increased proprioception (the ability to sense the body’s position in space).⁴³

So let’s look at what the scientific literature tells us so far about the effectiveness of different platforms and protocols on specific physical performance measures.

Strength and power

Power is not only one of the most important factors dictating success in most sports, but also arguably the most important neuromuscular determinant of independence and falls prevention

in older adults. Two studies from our laboratory at the University of Miami have examined the most effective protocol for improving power after a single bout of isometric squatting.^{12,13} Both studies used a triplanar WBV device. In the first, Bedient and her research group determined that a frequency of 30 Hz was most effective at improving power regardless of the amplitude setting. (Amplitude, within the WBV context, refers to how far the platform moves in a specific direction.) The results from Adams and her group supported the use of low frequencies (30–35 Hz) during low amplitude (2–4 mm) training, but suggested that 50 Hz may be more effective during high amplitude (4–6 mm) training (see Figure 7 on this page).

Lamont et al. produced study results that support those of Adams. These indicated that triplanar WBV applied intermittently using 50 Hz at a displacement of 4–6 mm produced higher vertical jump performance than any other frequency at this displacement level.⁴⁴ In contrast, a similar study performed recently by Armstrong, Grinnell and Warren found no significant differences in vertical jump performance across the entire spectrum of frequency/displacement combinations on the same triplanar WBV platform.⁴⁵

An examination of the effects of eighteen 20-minute sessions of vertical WBV training over a 6-week period showed that high-frequency/high-displacement (50 Hz, 4 mm) training led to greater improvements in power and selected strength measures than low-frequency/low-displacement (30 Hz, 2 mm) or nonvibratory training.⁴⁶ Using isometric squats on a vertically oscillating platform, Turner and his colleagues¹⁴ also found the greatest improvements in vertical jump with high-frequency/high-displacement (40 Hz, 8 mm) training.

Furness and Maschette⁴ examined the impact of WBV training frequency

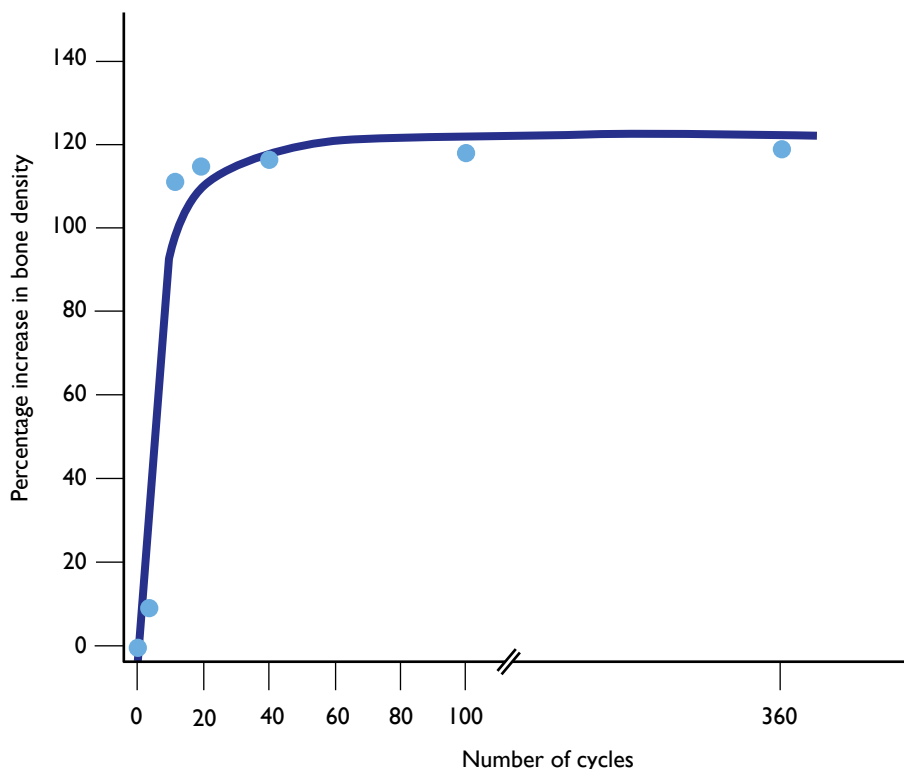


Figure 8. Changes in bone mass due to the number of loading cycles. Note the plateau in the rate of improvement when loading cycles exceed 40 cycles per day. After Burr, D. B., Robling, A. G., & Turner, C. H. Effects of biomechanical stress on bones in animals. *Bone*, 30(5), 781–786, 2002.

(number of sessions per week) on neuromuscular performance in a sample of community-dwelling older adults, average age approximately 72 years. The researchers found that during a 6-week training protocol on a centrally pivoting WBV device (progressing from 15 to 25 Hz at a reported displacement of 0.05 mm), 2–3 sessions per week were more effective than one. They also discovered that WBV training was more effective than the same training without WBV.

Overall, the results indicate that progressive protocols that eventually result in a high-frequency, high-displacement overload appear to be the most effective method of increasing strength and power. The effectiveness of low-frequency, low-displacement training, however, argues in favor of using a progressive protocol that gradually increases fre-

quency and displacements across a training period, and incorporating these protocols into the recovery phase of periodized training programs. (Such programs alternate work and recovery periods in the training cycle.) Additionally, the most effective protocols appear to use work cycles that range between 30 and 60 seconds, have a similar recovery cycle length, and incorporate multiple sessions per week lasting 30 minutes to one hour including warm-up.

Balance

Controlled studies have found improvements in balance, another key performance factor, using vertical, centrally pivoting and triplanar plates. The studies producing positive results on vertical displacement plates typically incorporated frequencies between 12.5 and 26 Hz with a 5–8 mm displacement.^{22,23}

Three types of whole body vibration machines

Vertical displacement machines: up and down movement

Triplanar machines: up and down, forward and back, and side-to-side movement

Centrally pivoting machines: see-saw, or teeter-totter, stimulus

These protocols also used 6 sets of 45–80 seconds with a 1:1 work:recovery ratio. When WBV was provided on a centrally pivoting plate, successful interventions used frequencies from 10 to 26 Hz with displacements ranging 2–3 mm.^{47,48} The duration of exposure on the plates typically lasted 2–4 minutes and the training frequency was one to 3 days per week. Finally, those studies showing positive impacts with triplanar WBV used quite consistent protocols.^{49,50,51} Frequencies ranged 30–40 Hz and amplitudes normally progressed from 2 to 5 mm. Protocols employed one to 3 repetitions of 8 lower-body exercises lasting 30–60 seconds with equivalent recovery periods, although recoveries were reduced in 2 of the studies as participants progressed. Training occurred 2–3 times per week.

Bone density

Part one of this article, published in the last *Journal on Active Aging*[®], presented a good deal of research supporting the positive impact of WBV on bone mineral content and bone mineral density (BMD), but what is the most effective WBV intervention? Von Stengel and colleagues⁵² examined the comparative effects over 12 months of three 15-minute WBV training sessions per week on BMD in postmenopausal women, average age approximately 68 years. The training consisted of 5 static and

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Whole body vibration, part two: what's the most effective protocol?

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dynamic lower-body exercises, including squats, heel raise, leg abduction and hip flexion. Participants trained on a vertical plate that vibrated at 35 Hz with a 1.7 mm peak-to-peak displacement, as well as on a centrally pivoting plate that oscillated at 12.5 Hz with a 12 mm displacement at the most distant position from the axis of rotation. Both groups showed significant increases in BMD in the lumbar spine (lower back) and femoral neck (connecting thigh to hip), while a group that performed light exercise showed a loss and no change, respectively. For the femoral neck, the relative BMD gain was more pronounced for the vertical displacement versus the centrally pivoting platform. In addition, multiple shorter-duration sessions appeared more effective than longer sessions since bone desensitizes to overload by approximately 40 cycles (see Figure 8 on page 69).

Cardiovascular fitness

The impact of WBV on cardiovascular fitness is still largely unexplored, as shown in the first installment of this article. The only study to examine the effects of WBV on this performance factor produced positive results using a progressive training program. This program increased the duration of each exercise from 30 to 60 seconds, the frequency from 30 to 40 Hz, and the amplitude from 2–3 to 4–6 mm on a triplanar platform. Additionally, recovery times between exercises were progressively dropped from 60 through 15 seconds, while dynamic and static exercises were incorporated.³

Body composition

What about the impact of WBV on body composition? Although studies have shown that WBV can increase oxygen consumption and caloric output when added to an existing exercise program,^{26,27,28} only one training study demonstrated declines in percent body fat.²⁹ For this study, Fjeldstad and colleagues used progressive triplanar WBV

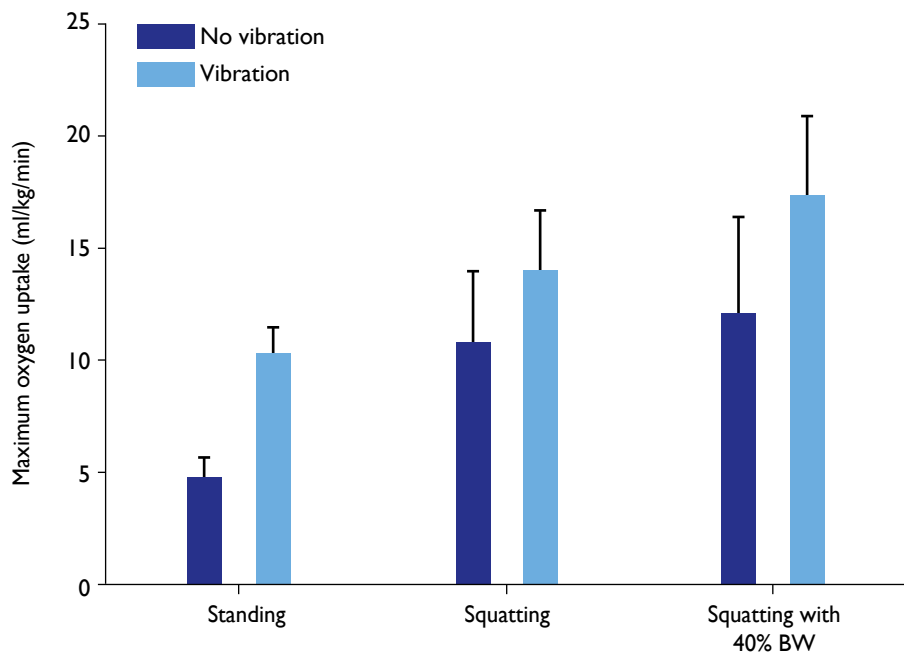


Figure 9. Oxygen uptake with and without WBV. Highest values were elicited during WBV squatting with 40% BW external loading. Data from Rittweger, J., Schiessl, H., & Felsenberg, D. Oxygen uptake during whole body vibration exercise: comparison with squatting as a slow voluntary movement. *European Journal of Applied Physiology*, 86(2), 169–173, 2001.

training, beginning at one set at 3 mm for 15 seconds (30 Hz) and increasing to 2 sets at 3 mm for 30 seconds (40 Hz). A 15-second recovery was provided between sets. Exercises included static shoulder presses, wrist curls and dynamic body-weight squats.

To maximize results, it appears that WBV can be coupled with added resistance to further increase caloric output. In 2 separate studies, Rittweger et al.^{27,28} demonstrated that during active squatting on a centrally pivoting platform (26 Hz, 7.5 mm), loading the individual at 40% of lean body mass—or, alternatively, with 40% body weight for men and 35% for women—significantly increased the metabolic cost of WBV exercise over an unloaded condition (see Figure 9 on this page). Similar positive impacts of WBV on energy expenditure were reported during dynamic squatting using 5 sets at 10RM (approximately 77% 1RM,

or repetition maximum) on a vertical force plate at 30 Hz and 4 mm displacement.²⁶ Increasing squatting speed from 4 or 6 seconds per cycle to 2 seconds per cycle also appears to significantly elevate energy expenditure during WBV on a vertical plate (30 Hz, 4 mm).⁵³ Finally, much greater increases in oxygen consumption are produced by applying the external loads at shoulder, rather than waist, level.^{27,54}

Conclusions

As you can see by reading through this article, there are a number of factors to consider when you attempt to answer the question, What's the best WBV training protocol? Some general recommendations, however, do appear to be appropriate across all vibratory plates and goals. These include:

1. Multiple sets appear more effective than single sets.

Resources

Print

“Whole body vibration, part one: what’s shakin’ now?”

Author: Joseph Signorile

Publisher: *Journal on Active Aging*, 10(5), 46–59, September/October 2011

“Whole body vibration training: a new wave in exercise intervention for older adults?”

Author: Joseph F. Signorile

Publisher: *Journal on Active Aging*, 5(5), 30–37, September/October 2006

* Available to International Council on Active Aging® members in the “Articles archives” (“Research”) in the members only section of the ICAA website, www.icaa.cc


2. Durations of 30–60 seconds appear most effective on vertical and triplanar plates, while somewhat longer durations (one to 4 minutes) are more frequently used on centrally pivoting plates.
3. A 1:1 work:recovery duty cycle appears most effective.
4. Multiple sessions (3–4 per week) are more effective than single sessions.
5. Just as with any training, intensity (frequency and displacement) and duration should gradually increase across the training period.

As to differences among protocols depending on machines and goals, I offer the following conclusions:

1. Centrally pivoting platforms, as would be expected by the nature of

the mechanism, feature lower frequencies and higher displacements.

2. Balance training appears better addressed using lower frequencies than strength or power training.
3. Balance may also be better addressed using somewhat longer exposure times (45–80 seconds).
4. In contrast to balance, bone density appears better addressed using shorter, multiple cycles (15-minute sessions; approximately 40 cycles) to retain sensitivity to the vibratory stimulus.
5. Multidirectional stimuli should also be emphasized when training bone density.
6. For body composition, caloric output is increased most effectively by using external loading, progressing if possible to approximately 30–40% body weight at the shoulder area. In a pilot study from our laboratory, however, we found 20% of body weight equally effective and possibly safer for older clients.
7. Cardiovascular improvements are best addressed using intervals, which manipulate speed of movement, and work:recovery duty cycles.

While the recommendations and conclusions above represent our best information to date, scientists and clinicians should continue to explore the most effective methods to target specific goals using different machines. Remember, we have been incorporating modalities such as resistance training and cardiovascular training arguably for centuries, yet we continue to increase our knowledge on the most effective use of these training tools. Whole body vibration is one of the more recent tools added to our “training toolbox.” Our understanding of its optimal utilization will also continue to increase for years to come. 

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Medical Center Geriatrics Research Center. Signorile has been involved in research using exercise to address independence and falls prevention for over 15 years. He has more than 50 refereed manuscripts, and 175 national and international scientific and 200 industry presentations. Signorile is also the author of the recently published book Bending the Aging Curve: The Complete Exercise Guide for Older Adults, available from Human Kinetics, www.humankinetics.com.

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Ageism

hides in plain sight

Old
Frail
Burden
Useless
OVER THE HILL.

In a society that still accepts ageism, denial takes many forms. It's time to challenge this damaging bias against older adults and signal 'the beginning of the end' for ageist practices

by Kathy Sporre, CSA

I recently attended a Marketing and Membership Committee meeting for our senior center in Fergus Falls, Minnesota, that had on the agenda changing the center's name to something ageless—something without *senior* in it or any other word that might be viewed negatively by those ages 55 years and better. The premise for changing our name was that people known as Baby Boomers, born between 1946 and 1964, are simply not identifying with the word *senior*. We feel a name change is a strategy we could use to attract the younger older adult, starting at age 55, and increase our membership. It's a strategy many centers across North America have already tackled.

At the meeting, I was somewhat intrigued when a committee member commented that he had never heard the term *ageism* prior to this discussion. *Merriam-Webster's Collegiate Dictionary* defines ageism as: "prejudice or discrimination against a particular age-group and esp. the elderly."¹ I believe the reason he had

never heard of this word is that ageism is one of society's last accepted "isms," which is just beginning to be challenged. Unless people have been affected by ageism personally, such as in the job market by being told they are too old for a position, most don't see it, let alone see the harm in it. That's because ageism has been entrenched and left unchallenged in our society for so long.

In fact, to challenge ageism can leave one open to comments like, "She's lost her sense of humor." This is probably one of the most commonly used defense mechanisms that ageism hides behind: **humor**. As William Thomas, MD, well-known geriatrician, author and aging advocate, says in his video *Elderhood Rising: The Dawn of a New World Age*, "If you go around making jokes based on another person's gender, that's sexism. If you make jokes about another person's race, that's racism. But, if you joke about somebody's age, that's called situation comedy."²

Defense mechanisms are forms of denial used to keep from confronting the truth. There is only one definition of denial—*refusal to admit the truth or reality*—and many ways that it manifests itself including, but not limited to, humor, global thinking, rationalization, minimizing, comparison, avoidance, distraction,

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Old
Frail
Burden
Useless
OVER THE HILL.

blaming and more. These forms of denial are intended to prevent people from confronting ageism. So, it's a good idea that as we start to uncover, discover and discard the manifestations of ageism, we understand these defense mechanisms for what they are. Lies.

Forms of denial

Tactics used to deny the existence of ageism can manifest themselves in simple forms or more complex façades. Let's look at **global thinking**. That's the tendency for individuals who are told that what they just did—such as purchasing an “over-the-hill” birthday card—is ageist. They deny it by claiming, “Everyone buys those kinds of cards.” This is a tricky one, because ageist behavior has been accepted for so many years that, in fact, almost everyone does purchase those types of cards, especially for people who reach decade birthdays.

Despite the fact that purchasing these cards is accepted by society, it does not make this behavior less ageist. We all age differently, due in large part to our lifestyles. It is wrong to suggest that because people reach a decade birthday, they're out of the game. So, remember, if someone tells you “everyone does it,” look a little closer at this global excuse for inappropriate behavior.

Rationalization is trying to justify unacceptable behavior such as ageism. When people rationalize doing or saying something ageist, they may say, “I'm just joking. I didn't mean to hurt anyone's feelings.” Colin Milner, CEO of the International Council on Active Aging® (ICAA), believes “there is nothing funny about ageism. In fact, the impact of negative views of aging is simple, according to a study led by Yale's Becca Levy,”³ Milner says. “Older people can literally ‘think’ themselves into the grave 7.6 years early by feeling ‘bad’ about getting old.” So, the messages we send have a huge impact, and may do more than just hurt someone's feelings.

Trying to make behaviors or consequences appear smaller or less important than they are is called **minimizing**. A person, for example, may say to those who are discussing ageism, “There are more important issues to be dealt with regarding older adults. This is a trivial issue when you compare it to (whatever).”

Minimizing is a close cousin to another defense mechanism called **comparison**, which shifts the focus to another issue facing older adults—one that is more harmful or poses more imminent danger. More concisely, a person might say, “Ageism isn't as bad as Alzheimer's disease, so why all the worry?” The point here is seeing how, through comparison, the topic shifts from ageism to Alzheimer's disease. This gets us nowhere in addressing ageism. It simply shifts the topic of conversation, resulting in a dead end to a real deliberation on ageism.

Avoidance does something similar. While it doesn't compare ageism to something more terrible to deflect attention away from the topic, avoidance is used to change the subject, ignore the subject, or manipulate the conversation to avoid talking about the subject. In Minnesota, our favorite expression to deflect attention focuses on the state baseball team—“How about those Twins?”

Distraction takes a little more stage presence than avoidance. This defense mechanism can be demonstrated by acting like a clown to get everyone laughing, having angry outbursts meant to frighten or intimidate others, threatening, posturing, and behaving in other shocking ways. Distraction works. It shuts down conversation on ageism by upstaging everything going on around the behavior.

Finally, **blaming** shifts responsibility for the ageist behavior to other people—often older adults themselves. For ex-

ample, a disgruntled employee may say, “If you waited on them every day, you'd understand why I call them cranky old geezers!” This statement implies that older adults deserve to be called ageist terms and bring these responses upon themselves.

These are just some of the forms of denial I've run into when trying to have healthy deliberations on ageism. This brings me to another question: Why are people, especially the professionals who advocate for older adults, in such denial of ageism? I can envision armies of people marching in protest if individuals from one of society's protected groups were talked about in such a manner or marketed to with such ridiculous paraphernalia. Seldom is there outrage when it comes to older adults.

Time for a change

Strangely enough, there still remains controversy over the very fact that ageism exists. Aging and wellness expert Kay Van Norman, owner of the consulting firm Brilliant Aging, recalls a conversation she had about ageism with a lawyer who appeared to be in his 30s. He claimed that derogatory jokes about aging were not discriminatory because everyone ages, so no one is singled out. “Ageist jokes *are* discriminatory,” Van Norman argues, “because they ‘accuse’ individuals of belonging to a specific group of people—frail, older adults with physical or cognitive challenges.” She continues, “Our culture does not condone derogatory statements and stereotypes about young people with those same challenges—why does it condone and even celebrate those attitudes towards older adults?”

Let's take a brief look at the world of people with disabilities. They have gone through a myriad of changes in the last century. Words such as *sanitarium*, *asylum*, *imbecile*, *retarded* and even *handicapped*—which were accepted in the 1930s and '40s—have been replaced

with terms such as *home-based community services, supervised living services, people with disabilities, and consumers.*

All the while too many in the aging world have clung to outdated terms and practices, such as *senior, elderly, senior citizen, senior center* (first opened in the 1940s by the New York City Department of Welfare⁴), and *senior discounts*. And they have continued the traditions of “black birthdays,” with all their insulting gifts. Are these terms and practices relevant to society and people ages 55 and better in 2011?

We need to retire much of our terminology and practices because of the stigma and negative stereotypes they perpetuate. According to mature market strategist and consultant Richard Ambrosius, “One of the most insidious elements of ageism is acceptance by many older adults ... it is just the way things are. Others will say, being a ‘senior’ beats the alternative. Sadly,” Ambrosius adds, “acceptance of aging stereotypes as reality can result in self-fulfilling prophecies of aging and the body succumbs to what the mind has accepted as normal. The result, of course, can be premature memory loss, frailty and decline.”


A starting point

At Webster University in St. Louis, Missouri, psychology professor Linda M. Woolf, PhD, has studied ageism, and states her theoretical basis for this phenomenon. In her study, Woolf also discusses social breakdown syndrome, one potential outcome of internalized ageist attitudes in older adults. This is similar to the self-fulfilling prophecy Ambrosius speaks of above regarding the acceptance of negative attitudes about age and aging.

Woolf claims the societal influences that form her theoretical basis of ageism must be addressed for ageism to be obliterated in the United States. These are:⁵

- fear of death in Western society (death is synonymous with old age)
- emphasis on youth culture in American society (marketing)
- emphasis in American culture on productivity (retirement being seen as unproductive)
- the manner in which aging was originally researched (in long-term care and nursing facilities, where individuals are often in ill health and stages of decline)

In announcing ICAA’s Changing the Way We Age® Campaign earlier this year, CEO Colin Milner accurately identified the need to address ageism, which is especially prevalent in Western culture. “By changing views and expectations of aging, it is our view that society will not only manage population aging better, but also promote a new vision of aging,” said Milner. “In that sense, we are not just shifting perceptions; we are changing lives.”

This is our starting point. Our rallying cry that signals the beginning of the end to the accepted ageist practices hiding in plain sight in society today. 

Kathy Sporre, CSA, has served as the director of the Fergus Falls Senior Center for over 20 years. They are the first nationally accredited senior center in Minnesota, and winner of the Minnesota Nonprofit Excellence Award. Sporre was appointed as a delegate to the National Institute of Senior Centers and cochaired a national task force that researched and reported on New Models of Senior Centers.

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3. Levy, B., Slade, M., Kunkel, S. & Kasl, S. (2002). Longevity Increased by Positive Self-Percep-

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4. Niles-Yokum, K., & Wagner, D. L. (2011). *The Aging Networks. A Guide to Programs and Services* (seventh edition), p. 35. New York NY: Springer Publishing Company.
5. Woolf, L. M. Ageism. Retrieved from <http://www.webster.edu/~woolfm/ageism.html>.

Resources

Internet

ICAA’s Changing the Way We Age® Campaign

www.changingthewayweage.com

Multimedia

Elderhood Rising: The Dawn of a New World Age

www.youtube.com/watch?v=ijbgcX3vIWw

Print

Treat Me, Not My Age: A Doctor’s Guide to Getting the Best Care as You or a Loved One Gets Older

Author: Mark Lachs, MD, MPH

Publisher: Penguin Group, 2010

“Ageism in America”*

Author: The Anti-Ageism Taskforce at the International Longevity Center

Publisher: International Longevity Center–USA, 2006

* Available at www.mailman.columbia.edu/sites/default/files/Ageism_in_America.pdf

Valle Verde commmits

to better
the world
with its
Green
Footprint
program

At Valle Verde Retirement Community in Santa Barbara, California, replacing lawn area with a succulent garden allows for almost zero irrigation, while creating a visually interesting destination garden

This progressive community for active, engaged older adults strives to be ‘a model, sustainable community’ through its award-winning green initiative

This is the eighth, and final, article in a series profiling the recipients of the 2010 ICAA Innovators Awards. Launched by the International Council on Active Aging® (ICAA) in 2003, these awards recognize creativity and excellence in active aging, honoring innovations that are leading the way, setting new standards and making a difference in the lives of older adults. Offerings target any or all of the seven dimensions of wellness—namely, physical,

Continued on page 80





Valle Verde commits to better the world with its Green Footprint program

Continued from page 78



(Left to right), Jeffrey Krutzsch and Tim Wetzel pose with Valle Verde's 'Campus Tram,' an electric-plus-solar 10-passenger cart that shuttles residents around the 60-acre campus

spiritual, intellectual, social, emotional, vocational and environmental wellness. ICAA supports professionals who develop wellness facilities, programs and services for adults ages 50 and over.

Set in the foothills of Santa Barbara, California, Valle Verde is a nonprofit, continuing care retirement community owned and operated by American Baptist Homes of the West (ABHOW), a senior living provider based in Pleasanton. The Valle Verde living experience, according to the community's website, emphasizes choice, individuality, a positive atmosphere and a commitment to environmental stewardship. Many improvements to the 60-acre campus have involved collaborative effort and innovative thinking about how to reduce the environmental impact on the community itself, as well as the world that surrounds it.

As an organization, "Valle Verde seeks to enhance the independence, well-being, and security of older adults through housing, healthcare, and supportive services," comments Executive Director Tim Wetzel. The community looks be-

yond the provision of resident services, he adds, and attempts to effect positive changes within society as well.

Accordingly, Valle Verde—with over 350 residents and 200 staff—"embarked on an ambitious path beginning in 2004 to become a model, sustainable community by reducing the campus's carbon output through the launch of our Green Footprint program," Wetzel explains. "This unique initiative reduces our impact on the surrounding environment by using new green-building techniques for remodeling homes, producing energy, recycling waste, and reducing the amount of natural resources used. Our commitment to better our world speaks directly to the success and lasting relationship Valle Verde has had in Santa Barbara for the last 45 years," he continues. "It also speaks to the desire of everyone at Valle Verde to continue to be a good neighbor, provide valuable services for seniors, and engage the community in a dialogue of significant importance."

Since 2004, Valle Verde's environmental sustainability practices have won broad

recognition and numerous awards. Honors include the International Council on Active Aging's first-ever Green Award, a new category in the 2010 ICAA Innovators Awards, presented to the community for its efforts to encourage stewardship.

To learn more about Valle Verde's Green Footprint program, the *Journal on Active Aging*® recently asked Wetzel and his colleague Jeffrey Krutzsch, director of operations, to outline the initiative's efforts and what they have meant for the community.

JAA: *What would you say are the roots of Valle Verde's commitment to environmental stewardship?*

TW: Our longest running recycling and re-use program, called La Tienda, was founded by Valle Verde residents in 1980. La Tienda is a Valle Verde community-run thrift store that collects unneeded clothing, electronics, linen, furniture and general merchandise from residents and the community. After cleaning and refurbishing merchandise, the store provides residents and neighbors with an on-campus, walkable option to purchase needed items, limiting the amount of waste that would otherwise be discarded.

JAA: *How did these stewardship efforts grow into Valle Verde's Green Footprint program?*

JK: Historically, Valle Verde has reserved over 66% of our campus as green space, including an oak woodland preserve. Our Green Footprint expanded on this desire to preserve the environment, when staff, residents, and community advisory board members came together to formally establish our program in 2004. Ideas were contributed and a strategic goal was initiated to incorporate

Continued on page 82

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Valle Verde commits to better the world with its Green Footprint program *Continued from page 80*



Solar panels at Valle Verde currently generate 71,400 watts of electricity per year. The panels pictured here are located on the top of the community's walkway covering, so they are both unobstructed from the sun and unnoticed by the casual observer

environmentally-friendly programs and ideas into all areas of daily operations. Efforts grow and evolve every year. In addition to this, our oak woodland preserve was expanded from 4 acres to 9.8 acres in 2011.

JAA: *What are the Green Footprint areas of focus and key goals, and why?*

TW: Our Green Footprint program focuses on energy, recycling, food, landscaping, transportation and green building. The overall goals are to:

- reduce electricity use combined with solar electricity generation
- decrease campus waste
- increase recycling
- implement green landscaping techniques
- use local farms for food
- encourage staff to use alternative forms of transportation
- reduce water usage
- incorporate green building techniques in all remodeling activities

A consistent theme behind our program is using less and caring more.

JAA: *How is Valle Verde working to achieve these goals?*

JK: We achieve our Green Footprint goals by implementing new steps annually and working to expand on what we have accomplished. For example, every year we expand our solar generation system, which has grown from 31,000

watts a few years ago to 71,400 currently. We are also incorporating green building into all remodels in the form of solar water heaters with backup flash (on-demand) hot-water heaters. This is on top of the solar tubes and skylights for natural lighting, energy-efficient appliances, and T-12 fluorescent lighting included in our apartment remodels a few years ago.

JAA: *How do you fund stewardship efforts?*

JK: Each year a portion of our capital budget is allocated to sustaining and expanding our Green Footprint program, and smaller green activities are funded by our operations budget. No resident rates are raised to fund the program. A wonderful benefit of the green initiative is that it not only results in quality-of-life improvements for residents, staff and the surrounding community, but it also saves money [see below]. For many of our green efforts, we anticipate that the initial startup costs will be reimbursed within 10 years.

JAA: *How has Valle Verde sought to engage residents in participating in the Green Footprint program? And what sort of response has there been?*

JK: Residents have been very involved and interested in these improvements from the beginning, and many advise us on new techniques that are available. An example: At the request of residents, our kitchen eliminated Styrofoam and started providing compostable takeout containers and ceramic mugs for their use. Residents also contribute to our annual Eco-Faire, which spotlights our accomplishments and recognizes residents and staff that make our program successful.

JAA: *In your view, what does a collaborative approach bring to a green initiative in terms of sustaining support and increasing effectiveness?*

Resources

To learn more about environmental wellness and sustainability, refer to the selection of articles on the topic in the "Articles archives" in the members only section of the International Council on Active Aging website, www.icaa.cc.

TW: Valle Verde's Green Footprint program is successful because it is a collaborative effort that gets residents, staff and board members involved in a better future. By setting a clear mission of making long-lasting benefits in the areas of water consumption, waste reduction and air pollution, it allows everyone to work either individually or collectively to implement steps both great and small that have proven successful through economic benefits, local and national recognition, and idea-sharing with other communities.

JAA: *Most initiatives encounter challenges. What challenges have you encountered with the Green Footprint program, and how have you addressed them?*

JK: The main challenge that must be addressed is cost and the long-term recuperation of initial expenses. This is the most challenging, because all of our efforts are implemented by working within our capital and operating budgets and not by raising the rates of our residents to cover the costs. Thus far we have been extremely effective at handling the cost challenges by reevaluating our plan each year and determining what is realistic based on the year's budget. We are seeing recuperation of initial costs. Our Green Footprint program is saving us about \$55,000 per year in electricity, \$15,000 in gas, and \$12,000 in water costs.

JAA: *What would you say are the main benefits and opportunities of Valle Verde's Green Footprint for the community, for the residents and for the community at large?*


JK: Valle Verde's Green Footprint program benefits the community through lowering our greenhouse gas emissions, reducing traffic, and most importantly in this economy, by creating jobs through the use of local businesses as suppliers. Valle Verde is contributing to the continuation and creation of local jobs

in solar generation, alternative building materials and local agriculture. Our solar panels are made in the United States and installed by local companies. We also worked with our food supplier to change from out-of-state produce purchases to supporting local farms, and we now purchase up to 85% of the produce consumed on campus from California.

JAA: *In your view, how does Valle Verde's Green Footprint advance active aging and multidimensional wellness specifically?*

TW: All of Valle Verde's efforts directly impact an extremely sensitive and vulnerable population—older adults. This means that residents who are the most vulnerable to environmental toxins and pollutants benefit daily from the combined efforts of our Green Footprint program. These range from the reduced air pollution due to our alternative transportation programs, to the nutritional benefits of fresher local food, to healthier building supplies in our Built Green home remodels. We believe these benefits aid those who are recovering from surgery, fighting off disease, or simply enjoying their retirement years.

JAA: *Are there any final words of advice that you would like to offer readers of the Journal on Active Aging about making or expanding a commitment to environmental stewardship?*

TW: Sometimes when looking at the big picture, environmental stewardship may seem overwhelming, but keep in mind that no step is too small. Allow residents/members and staff the ability to evaluate their everyday activities and offer suggestions on what they need in order to implement green practices, and then support them in making the changes. By implementing a friendly collaborative process, your community or center will evolve in an environmentally beneficial manner and ultimately your organization will become stronger. 

The Journal on Active Aging thanks Tim Wetzel, Jeffrey Krutzsch and Toby Ayars for their help with this article. For further information about Valle Verde Retirement Community, visit www.valleverdesb.com.

Images courtesy of Valle Verde Retirement Community

Building a successful environmental initiative: five key steps

1. Meet with your residents/members and staff in the very beginning to establish an overall vision and achievable goals. Gather ideas from individuals and departments on ways to implement change.
2. Create a budget and start small. Small successes can quickly grow into large accomplishments.
3. Establish an environmental committee made up of residents/members and staff.
4. Meet with local suppliers and discuss what is realistically achievable within your budget. Most suppliers have their own green practices and will work to help you accomplish yours.
5. Set up an annual review with residents/members and staff to discuss what is working and what is not. Not all green practices work for every organization. Pick the ones that are suitable to your constituents, and then expand upon them. Building upon your strengths will make you a better and greener community or organization.

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The International Council on Active Aging® encourages you to gather your staff for internal brainstorming sessions about what your area of the active-aging industry may look like in 2020. Then go online to ICAA on Facebook and share your ideas with other visionaries.

For more information about ICAA 2020, visit
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Catch up with the association that supports professionals in older-adult fitness and wellness



Dr. Maria Fiatarone Singh

Active-aging expert to advise ICAA

Renowned geriatrician Maria Fiatarone Singh, MD, FRACP, recently joined the International Council on Active Aging's Advisory Board, the association is pleased to announce. Fiatarone Singh is the John Sutton Chair of Exercise and Sport Science in the School of Exercise and Sport Science at the University of Sydney, Australia. Board certified in internal medicine and geriatric medicine, the professor is a fellow of the Gerontological Society of America and the Royal Australasian College of Physicians, as well as a member of the American Geriatrics Society and the Australasian Society for Geriatric Medicine. Her research, clinical and teaching career to date has focused on the integration of geriatric medicine, exercise physiology and nutrition as a means to improve quality of life for older adults.

"We're delighted that Dr. Fiatarone Singh has agreed to serve on the ICAA Advisory Board," says Colin Milner, the association's founder and CEO. "She brings to the ICAA community a wealth of knowledge and experience in evidence-based interventions to enhance older-adult health and well-being."

ICAA supports, partners with new campaign

ICAA's Colin Milner was among the speakers at a briefing about exercise and aging on October 19 in Washington, DC. Hosted by United States Senators Herb Kohl (D-WI) and Mark Udall (D-CO) of the Senate Special Committee on Aging, the event also introduced the Go4Life® Campaign from the National Institute on Aging (US National Insti-

tutes of Health). This new campaign aims to provide resources to Americans ages 50-plus that they can use to incorporate exercise and physical activity into their everyday lives.

ICAA supports Go4Life, which will be an essential part of ICAA's Changing the Way We Age® Campaign, launched this year to help shift society's perceptions of aging. Featured on the www.changingthewayweage.com website, Go4Life will be integrated into the ICAA campaign as an ICAA Champions Program Partner.



Patsy LeBlanc

Staff changes announced

ICAA regrets to announce that President Patrick Hald and Director of Business Development Amie Preston left the association this fall. The couple recently moved to Pennsylvania, where Hald now serves as president of HydroWorx, an ICAA Preferred Vendor. ICAA wishes Hald and Preston well and thanks them for their contributions to the company.

Alongside these fall farewells, ICAA extended a warm welcome to Patsy LeBlanc, who joined the team in November as Director of Market Development. LeBlanc has worked in the fitness industry for 30 years. Prior to joining ICAA, she was Keiser Corporation's regional manager (sales), during which time she worked with many retirement communities to implement wellness programs.

LeBlanc looks forward to her new challenge. "I believe in the ICAA mission," she says, "and am proud to be associated with an organization that's working to change negative perceptions of aging and encourage healthier lifestyles for older adults."

Update: ICAA works with Osteoarthritis Action Alliance

In April 2011, ICAA joined the Osteoarthritis (OA) Action Alliance, a new coalition of concerned organizations working collectively to elevate OA as a national health priority. The Alliance is spearheaded by the Arthritis Foundation and the Centers for Disease Control and Prevention in the United States. Pat Ryan, ICAA's vice president of education, is ICAA's representative to the physical activity subcommittee of the Alliance. This subcommittee's first project is to conduct an environmental scan identifying information already available that supports the goal of increasing physical activity among people with OA. So far, Ryan has provided suggestions and resources to the group. She continues to work with colleagues to define the scope and criteria for materials that might be included as resources for others. ☺

2012 ICAA Member Planning Guide

January 2012

- | | |
|----|---|
| 11 | Presenter applications available for ICAA Conference 2012 |
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February

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Have you ...

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- *Supported* ICAA's Changing the Way We Age® Campaign by becoming an ICAA Champion or campaign partner?
- *Enrolled* your community in the ICAA/ProMatura Wellness Benchmarks?



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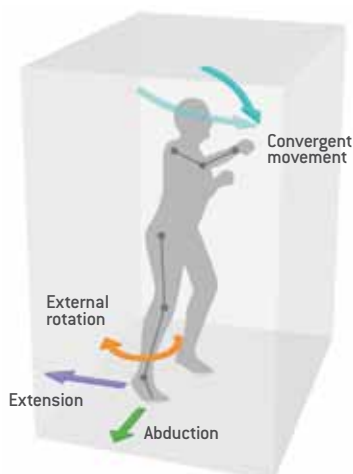
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