VISION

To improve the quality of life and healthcare for older adults in South Carolina through translational research and education of health professionals and the public.

MISSION

The Center on Aging Internal Advisory Committee ensures that the strategic plan for the Center is closely aligned with MUSC strategic goals. The Internal Advisory Committee meets once a year to discuss strategic goals and outcome measures. The Center on Aging will utilize resources within MUSC as well as state-and nation-wide resources at different steps of the process, starting with the wealth of knowledge that exists regarding our state and its citizens; for example, in collaboration with the Lieutenant Governor’s Office on Aging. An important goal is to establish and utilize measurable outcomes for quality of life, since the overall goal of this strategic plan is to enhance the quality of life for older South Carolinians.
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“In youth we learn; in age we understand.”

Marie von Ebner Eschenbach
EXECUTIVE SUMMARY

The work and outreach activities of the Center on Aging would not have been possible without the hard work of the Center on Aging Associate Directors, Dr. DeAnna Adkins and Dr. Vanessa Hinson, as well as the Executive Committee and the Internal Advisory Committee. The revised 5-year strategic plan for the Center on Aging is the product of this cross-campus collaboration and truly represents an inter-disciplinary working plan for the future of geriatric education and research at MUSC.

Center on Aging contributions during the FY16 included participating in activities of clinical and basic science programs on aging across the different MUSC colleges, local community organizations, as well as state-wide collaborations through the South Carolina Aging Research Network (SCARN). The Center on Aging has continued to foster relationships with numerous research, education, and community partners to best fulfill MUSC’s strategic goals.
STRATEGIC GOALS: FY13-17

In accordance with the most recent 5-Year Business Plan (FY13-17) for the Center on Aging, the Strategic Goals for this period have been organized to reflect MUSC’s four overall strategic directives:

I. Interprofessional/Interdisciplinary: The Center on Aging will be a hub for interdisciplinary aging research and education across all colleges.

II. Technology/Innovation: Provide state-wide connectivity that optimizes current and novel technology and innovations for older adults in South Carolina

III. Entrepreneurialism: Promote communication and interaction with local and state-wide companies regarding health care or research for elderly and encourage partnerships to enhance entrepreneurial efforts in aging research

IV. Globalization: Connect MUSC researchers with a global network of scientists in healthy aging and age-related disease.
CENTER ON AGING ACTIVITIES: FY16

May/26/2015
Daniel Bunn Tours the Carroll A. Campbell, Jr. Neuropathology Lab

Senator Tim Scott’s Aide, Daniel Bunn, toured the CCNL to learn about the research conducted at MUSC. They discussed how the Brain Bank is providing valuable tissue samples to support cutting edge research, not only in SC, but internationally. Earlier this year, Senator Scott presented to Congress the work being done at MUSC and the Brain Bank to promote healthy aging and advancement of research for age-related diseases.

June/2015
Center on Aging Newsletter

Promoted MUSC Wellness Center Healthy Aging Week, MUSC Urban Farm, Alzheimer’s Association Walk to End Alzheimer’s, Respite Care Charleston’s Moment’s on Canvas, National Down Syndrome Society’s Buddy Walk, and MUSC Senior Mentor Program
June/4-7/2015
1st International Conference of the Trisomy 21 Research Society - Changing Paradigms in Down syndrome

For years the rather small international community of researchers committed to understanding the effects of trisomy 21 and to use this knowledge to expand opportunities for people with Down syndrome has struggled to obtain resources to support research, to recruit new generations of investigators to this area, and to enable investigators to communicate with each other to reach common goals.

A core group of those investigators has established the Trisomy 21 Research Society, an international professional organization for those engaged in Down syndrome (DS) research. The society will provide a nexus for organizing communication between researchers and with organizations that have the means to disseminate these news to families; to assure that young researchers see the excitement and potential of a career in a rapidly advancing area that is making contributions to the quality of life for people with Down syndrome every day; and to coordinate a biannual international meeting of investigators. The first meeting was held in Paris in the new Brain and Spine Institute building of Hospital Pitié Salpêtrière.

This three and half day event discussed many aspects of Down syndrome from development to aging to clinical trials in an informal academic setting. Topics for discussion included molecular mechanisms, animal modelling, drug discovery and care. With plenty of opportunity for networking and debating, this international meeting brought researchers up to date with current research and thinking regarding Down syndrome.

MUSC’s delegation to the conference included, Lotta Granholm, Aurélie Ledreux and Eric Hamlett. Eric presented on a novel treatment strategy using mouse models and utilizing pro-resolution compounds to counter-affect enhanced inflammation that is observed in the brains of individuals with DS. Dr. Granholm gave a talk about biomarkers in Down syndrome-related Alzheimer’s disease and generated a lot of interest while presenting some exciting new findings.

Eric was enthusiastic about his experience at the conference, saying that he enjoyed the program having such a strong focus on cutting edge science being conducted around the world. While, many conferences offer presentations with clinical-based information, this was specifically research related, which made it a unique opportunity to learn about the most novel advancements. Dr. Granholm has since been asked to participate on the Scientific Board for T21RS, and will help plan the next International conference which will be held in Chicago in September of 2017.
July/2015
The Circle 2nd Edition and Sales

The Circle: A Walk With Dementia is a personal tale of one family’s journey through the battle of Alzheimer’s disease.

The author, Mrs. Sally Hughes Smith, has donated all proceeds from the sale of this book to the MUSC Center on Aging to support research into Parkinson’s and Alzheimer’s diseases, dementia, vision and hearing loss, and other age-related problems.

The 1st edition of The Circle has brought in over $35,000. Most of this income has been used to fund research on Alzheimer’s disease, as well as bring world-renowned speakers on age-related research topics to MUSC.

The 2nd edition has just been printed and is now available for purchase on Amazon or email dillonk@musc.edu

August/2015
Progressnotes InShort article (Kim McGhee)

Fall 2015 BETA TESTING Down Syndrome study may reveal an early biomarker of Alzheimer’s Disease by Sver Aune. Illustration by Emma Vought
**September/11/2015**  
**Alzheimer’s Assoc. 14th Annual Education Workshop:**  
“Putting the Pieces Together”

Dr. Granholm was one of several speakers at this event held at Trident Technical College. Her speech covered areas related to pathology of Alzheimer’s disease as well as common pathways for Healthy Aging.

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**September/19/2015**  
**Alzheimer’s Association – Walk to End Alzheimer’s**

The Center on Aging’s “Endow Your Brain” team raised nearly $2,000 for the Alzheimer’s Association and had over 20 participants at Riverfront Park in North Charleston. The MUSC team was one of the most successful teams in the Charleston area. The Alzheimer’s Association Walk to End Alzheimer’s is run in more than 600 communities worldwide, and is the world’s largest event to raise awareness and funds for Alzheimer’s care, support and research. This inspiring event calls on participants of all ages and abilities to reclaim the future for millions! The CoA is happy to participate in this inspiring event, which also serves to inform the community about our activities and clinical programs at MUSC.
**October/2015**

**Center on Aging Newsletter**

Promoted MUSC Wellness Center’s Senior Programs, recent MUSC publications, CCNL, Division of Periodontics Project: FLOSS Facilitating Long-Term Oral Health Services, MUSC Senior Mentor Program, Putting for Parkinson’s Golf Event

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**October/15/2015**

**Induction as Guest Professor – Karolinska**

Dr. Granholm was inducted as a Guest Professor of the Department of Neurobiology, Care Sciences and Society (NVS) of the Karolinska Institutet (KI). KI is the largest center in Stockholm for biomedical research and education, with 30% of the medical education, and more than 40% of all medical research in Sweden. The professor installation ceremony is one of the grandest academic events of the year, and was particularly festive with the announcement that one of KI’s graduates has received this year’s Nobel Prize. Dr. Tomas Lindahl and two other investigators were awarded the Nobel Prize in Chemistry. Their prize motivation was “for mechanistic studies of base excision DNA repair”.

Founded in 1810, KI currently has about 2,000 graduate students, with more than 300 graduates each year. During their official promotion, each PhD candidate receives their traditional hat, gold ring, and diploma in the presence of friends and family. Dr. Granholm was herself, one of these candidates, graduating from KI with DDS and PhD degrees in 1985, so it was especially rewarding for her to return as a Guest Professor.
November/1/2016
5th Annual Respite Care Charleston Moments on Canvas Art Auction and Sale

The Center on Aging Coordinator, Kelly Dillon, supported this event with promotions in newsletters and MUSC Broadcast Messages, as well as participant portraits, event photography, served on the event planning committee and designed the event programs and posters. Kelly has been working diligently with this organization for years, and provided excellent service and expertise. This event raises funds to support Respite Care Charleston’s day programs and celebrates the creative minds through the artwork painted by their participants suffering from dementia.

December/10/2015
Senior Angel Tree

The Center on Aging collected requested personal items, cash donations and gift cards for 3 area seniors in need for the holidays through the Lowcountry Senior Network’s Senior Angel Tree program.

January/2016
Center on Aging Newsletter

Promoted Warrior Surf Foundation, Dr. Balasubramanian’s Yogic Breathing for AD research, MUSC Center for Telehealth – Telesstroke, MUSC Libraries, MUSC Wellness Center, MUSC Digestive Disease Center, Stroke Recovery Research Center, MUSC College of Nursing PhD Nursing Science Program, MUSC Senior Mentor Program.
February/25/2016
Private Screening of Of Mind and Music, American Theater

As part of the Aging Research Day, the Center on Aging hosted a private screening of Of Mind and Music, a film based on Dr. Nicolas Bazan’s novel, Una Vida. Dr. Bazan was the keynote speaker at Aging Research Day. Nearly 140 attended the event to screen the film and participate in a Q/A session with Dr. Bazan.

In Dr. Nicolas Bazan’s first novel, neuroscientist Alvaro Cruz (played by the actor Joaquim de Almeida) finds himself haunted by a recurring dream of a banjo player in an elusive cornfield that leads him on a personal quest to uncover the mysterious past of a New Orleans street singer known as Una Vida. It is a story about the devastating curse of Alzheimer’s disease, and the healing and preserving effects of music.

All who attended the showing of this movie were touched by the quality of the movie, the story, and the implications for potential therapy of music for those with this condition.
February/26/2016
12th Annual Aging Research Day

The South Carolina Aging Research Network (SCARN) presented the 12th Annual Aging Research Day Conference. Hosted by the Center on Aging this year, the theme was “Sensory Systems in Aging” and included interesting lectures and posters related to this topic. The keynote speaker was Dr. Nicolas Bazan, who is internationally recognized for his contributions to neuroscience and research in vision and ophthalmology, as well as an author, educator, mentor, developer, music enthusiast, and art lover. Dr. Bazan’s first novel was adapted into the award winning film, Of Mind and Music, formerly Una Vida, which was a large part of the inspiration for this year’s theme on sensory systems.

The conference was at full-capacity with 130 community members, researchers, students, and healthcare workers attending. An additional 25 Senior Mentors joined the reception after the conference to view the posters and receive recognition from Dr. Deborah Deas, interim Dean for the College of Medicine.

Aging Research Day Program:

Xue Z. Liu, MD, PhD (University of Miami)
UNRAVELING THE GENETICS/GENOMICS OF PRESBYCUSIS
Approaches to Identifying Genes for Complex Diseases

Bärbel Rohrer, PhD (MUSC)
COMPLEMENT-ACTIVATION AND AGE-RELATED MACULAR DEGENERATION:
Generation of Novel Treatments and Diagnostics

Chris Gregory, PhD, PT (MUSC)
BEYOND THE MOTOR SYSTEM:
Contributors to post-stroke walking dysfunction

Ellen Vincent, PhD (Clemson)
EFFECTS OF VIEWING NATURE IMAGES ON HEALTH

Renata Leite, DDS, MS (MUSC)
FLOSS – Facilitating Long-term Oral Health Skills

Victor Hirth, MD, MHA, CMD, FACP, AGSF (Palmetto Health)
APPLICATION OF TECHNOLOGY TO ENHANCE COORDINATION AND CARE

Johnell Brooks, PhD, (Clemson)
A DECADE OF DEVELOPMENT: CLINICAL DRIVING SIMULATORS

Stacey Pierce (PharmRight Corporation)
A PROACTIVE SOLUTION TO CARE

Nicolas Bazan, MD, PhD (Louisiana State University)
THE VULNERABILITY OF SIGHT AND COGNITION IN AGING
Aging Research Day Travel Fellowship Award:

A Travel Fellowship was awarded for the top three abstract submissions of age-related research that best demonstrated inter-disciplinary focus. All students, post-docs, fellows, and residents were invited to enter.

The recipients were:
1st Prize - $3,000
Elisabeth Obert (MUSC) “Effects of the aCT11 Peptide on Retinal Pigment Epithelium Cell Integrity In Models of Age-Related Macular Degeneration”

2nd Prize - $2,000
Yifang Li (Clemson) “Checking in With My Friends: Results from an In-Situ Deployment of Peer-to-Peer Aging in Place Technologies”

3rd Prize - $1,000
Eric Hamlett (MUSC) “A coerulean focus on memory performance with targeted DREADDs”

We were appreciative of the following outstanding judges, who carefully evaluated each abstract: Dr. Steve Carroll (Chair of the Department of Pathology and Laboratory Medicine, MUSC), Dr. Cheryl Dye (Director of the Institute for Engaged Aging, Clemson University), Dr. Sue Levkoff (Director of SmartSTATE SeniorSMART Center of Economic Excellence), Dr. Marianne Schultzberg (Vice Dean for Doctoral Education, Karolinska Institutet)

Sponsors and Tables:
Alzheimer’s Association
Amedisys Home Health
Caris Healthcare
ComFor Care Home Care
Franke at Seaside
Harvest Health & Rehab of Johns Island
Home Care Assistance
Home Instead Senior Care
MUHA Stroke Program
MUSC Addiction Sciences
MUSC Center for Telehealth - Telestroke Program
MUSC Digestive Disease Center
MUSC Foundation for Research Development
MUSC Hearing Research Program
MUSC Institute of Psychiatry
MUSC Libraries
MUSC Movement Disorders Program
MUSC SC Clinical + Translational Research Institute
MUSC Stroke Recovery Research Center
MUSC Wellness Center
MUSC Women Scholars Initiative & College of Medicine Center for ARROWS
Pharm Right Corporation
Presbyterian Communities
PruittHealth
Roper Clinical Biotech Research Institute
Senior Directory
The Bridge at Charleston
March/8/2016  
Lowcountry Senior Network March for Meals Food Drive

The Lowcountry Senior Network to support Charleston Area Seniors and Meals on Wheels of Charleston to stop senior hunger! This Food Drive celebrated the 14th Annual March for Meals Campaign.

March/9/2016  
2016 Retired & Senior Volunteer Program Recognition Luncheon

Volunteered to help show appreciation to the RSVP Volunteers who do so much to give back to Charleston, Berkeley, Dorchester and Colleton Counties. The RSVP program provides opportunities for people age 55 and over, with a variety of life experiences, to volunteer in their community. Volunteers are matched with multiple organizations, giving countless opportunities. Mary Rohaley, RSVP Director, 843-722-4127, rsvp@charlestonareaseniors.com

April/4/2016  
17th Annual Frontiers in Neurosciences Research Day

Each year, the Neuroscience Institute at MUSC hosts a research day consisting of lectures and poster presentations from labs all over the state. The event includes a nationally recognized keynote speaker as well as four presentations by scientists and/or physicians from MUSC or other South Carolina institutions. The lectures provide the latest information on cutting-edge basic brain and behavioral science relating to the chosen theme. This allows physicians to apply the most up-to-date research available for the diagnosis and treatment of their patients. The Center on Aging assisted in preparing for the event and helped with event registration and set-up.

April/4/2016  
Respite Care Charleston 12th Annual “Betty Cannon” Golf Tournament

The tournament is a benefit event to raise awareness and support for Respite Care Charleston. The Center on Aging participated through helping to promote the event and by volunteering the day of the tournament.
May/11/2016
Senior Mentor Program Graduation Luncheon

The Center on Aging assisted with event and photography for this annual luncheon to celebrate the graduation of MUSC's medical students and honor their senior mentor volunteers.

Dr. Donna Kern presented Michelle Crouse (above left) and Jeffrey Waltz (above right) with the 2016 Putman Geriatric Training Award. Mr. Paul Putman, known to his friends and family members as “Put,” was dedicated to the Senior Mentor program. He and his wife, Smiley, had both served as mentors for years when Put passed away, at which time Smiley and their children decided to recognize graduating students with exceptional empathy and compassion with senior patients to be presented in his honor.

Last year Smiley also passed away and the family generously decided to continue with the Putman Geriatric Training Award, extending it to 2 graduating medical students. The students selected this year have not only demonstrated compassion and empathy while working with their senior mentors, but have extended their generosity out into the community. These students truly embody the MUSC Motto “She (the university) enriches by giving generously.”
COLLABORATIONS + MEMBERSHIPS

Alzheimer’s Association, SC Chapter
Cindy Alewine, President/CEO

This crucial organization provides support, research studies, and information/advocacy for the millions of Americans suffering from dementia. Dr. Granholm serves on the SC Chapter Board for Alzheimer’s Association, and has, among other things, helped organize an education conference, as well as a workshop for researchers in Chicago devoted to Alzheimer’s disease in those with Down syndrome. During the current year, several members of the CoA Executive Committee have participated in the educational activities of Alzheimer’s Association, helped work on fundraising opportunities including the bike race in the summer and the fall Walk To End Alzheimer’s, where we had an MUSC team.

Carroll A. Campbell Jr. Neuropathology Laboratory (CCNL)
Dr. Steve Carroll, Director

Founded in 2009 as a separate program within the Center on Aging to provide South Carolina with its first and only human brain bank. During this fiscal year, the CCNL Brain Bank successfully merged into an expanding Bio banking and pathology program at MUSC, under the Leadership of Dr. Steve Carroll, Chair of Pathology. The Center on Aging will continue to provide support and research input to the CCNL Brain Bank, and there is a close collaboration between CoA and Brain Bank investigators.

Harleston Senior Village
John Milkereit, Organizer

The Center on Aging has promoted the village project in newsletters, online and supported community events via MUSC Broadcast Messages. A group of volunteers in downtown Charleston has been working toward establishing a “senior village” in the Harleston Village neighborhood. A senior village is an organization that provides residents with access to needed services as they age, so they can remain in their homes as long as possible. The group has drawn on the experience of similar ventures in Hilton Head, SC, and Chapel Hill, NC, where there are thriving senior villages. The primary model is Beacon Hill Village in Boston, MA, which began in 2001 as a grassroots effort.

Lowcountry Senior Network
Bill Sweezy, President

The Lowcountry Senior Network (LSN) is the premier networking organization for professionals in the Lowcountry who are committed to providing quality services to seniors, caregivers, and adult children. The LSN meets once a month and coordinates activities of both non-profit organizations and companies devoted to senior services and activities in the Low country. This is an excellent way to get connected with both companies and organizations in our area.

Neuroscience Institute
Dr. Jacqueline McGinty, Director

The Neuroscience Institute (NI) of MUSC is a center of neuroscience research, education and treatment that facilitates interdisciplinary collaboration among basic and clinical neuroscientists. It is not housed in a single department, but rather is a university-wide institute with the aim of supporting neuroscience research in any department or college of MUSC. The primary focus of the NI is to promote translational research to bridge the gap between the basic sciences and clinical sciences. It brings together the minds necessary to treat and cure neurodegenerative, neuropsychiatric, addiction and sleep disorders and provides many of the resources needed to achieve these goals. Today, scientists at the NI focus on cognitive neuroscience, neurodegenerative disease, addiction, pain, mood and sleep disorders research, to name a few areas. The Neuroscience Institute also emphasizes development, education, and outreach.
National Aging in Place Council (NAIPC)
David Heilman, President

NAIPC established a network of professionals from the private, public and non-profit sectors who can help plan for future housing and care needs. NAIPC works to achieve this mission by:

- Reaching out to seniors.
- Establishing local Aging in Place Councils among businesses, public agencies, non-profit organizations, the aging in place professional network, and the health care system. Homeowners benefit if professionals from the various disciplines are knowledgeable about one another, and better professional referral networks are established. Increasing the level of knowledge and skills of Aging in Place professionals from a wide variety of fields whose collaboration and involvement is essential to insuring greater public access to programs and support services that promote independent living.
- Advocating for policies, regulations and business practices that promote Aging in Place.
- Promoting National Aging in Place Week and other events through various media. During this week, members of the National Aging in Place Council® coordinate events in their communities to highlight local programs and services available to help increase independent living.

Senior Mentor Program
Dr. Heather Boger, Director

Coordinated under the Dean’s office of the College of Medicine (COM) and initiated by the Center on Aging, the Senior Mentor Program celebrates its 12th year providing comprehensive geriatric education to all medical students at MUSC. This 4-year education program for the students would not be possible without the participation of our more than 400 community volunteers, who selflessly give of their time to educate our future health care professionals. Dr. Heather Boger is the Director and has lead this program to another successful education year for MUSC Medical students.

Senior Smart CoEE
Dr. Sue Levkoff, Director

The Senior Smart CoEE (Center on Economic Excellence) works to improve the lives of older adults by creating products, services, and conducting research to promote independence. Through the partnership of many organizations some of the toughest issues facing the aging population are tackled. It is the first CoEE in the country to mobilize top academic experts in geriatric medicine, engineering, neuroscience, public health, and social work, along with industry leaders and community partners, to help seniors live independently and safely. The Center’s work falls under three major themes: SHARP BRAIN (helping seniors maintain intellectual activity); SMART WHEELS (promoting independent mobility outside the home for seniors); and SMART HOME (helping seniors maintain independent mobility inside the home).

South Carolina Aging Research Network
Dr. Sue Levkoff, President 2016-17

SCARN was founded in 2006 in response to the Health Sciences South Carolina (HSSC) initiative. SCARN has two members from each of the HSSC institutions and meets every two months to discuss inter-professional research and education initiatives at the 6 HSSC institutions. SCARN also organizes the annual Aging Research Day, which takes place in the spring every year either at MUSC, USC, or Clemson.