



CHANGING WHAT'S POSSIBLE

# MUSC Center on Aging Annual Report FY 20-21

[muscd.edu/aging](https://muscd.edu/aging)

280 Calhoun Street, MSC 142

Charleston, SC 29425



# MUSC Center on Aging

Message from **Heather Boger, Ph.D.**

Interim Director | Associate Professor



The COVID-19 pandemic has created a lot of distractions and disruptions in the lives of everyone over the last 18 months. As we end this fiscal year, it is refreshing to be able to look back and reflect on all that we were still able to accomplish, such as providing education and resources to our community, continuing our research missions by applying for and receiving grant funds to better the lives of others, and to expand our educational mission by recruiting more volunteers from the senior community to participate in the training of health professional students.

I am always amazed and humbled by the efforts of everyone around me, including our Center on Aging team, as well as those in the community, who strive on a daily basis to improve the health and wellness of South Carolina seniors.

I invite you to take a few minutes to see what all we have been able to accomplish this last year, for which, your continued participation and support has made possible. Thank you for an amazing year and as always, I look forward to our collaborative efforts!

At this time, I would like to close by asking that you all take care of yourselves and your loved ones...and remind you that we will get through these tough times together!

A handwritten signature in black ink that reads "Heather Boger". The signature is written in a cursive, flowing style.

Heather Boger, Ph.D.  
Associate Professor and Interim Director  
Center on Aging



## WHAT WE DO

### EDUCATION

- Organize interprofessional symposiums around age-related topics and concerns.
- Initiate interprofessional, collaborative opportunities across all MUSC colleges.
- Expand geriatric education.
- Support volunteer opportunities for MUSC students in the field of senior services.

### RESEARCH

- Strengthen the network of aging research and healthcare at MUSC.
- Establish interdisciplinary relationships with research teams at MUSC in conjunction with community partners.
- Develop a world-class aging center to generate innovative research.
- Create career development opportunities for young and mid-career faculty in areas of aging under the guidance of academic leaders.
- Collect community feedback to address need and explore various funding opportunities.

### SERVICE

- Host age-related symposiums for the local and state community.
- Conduct active, hands-on workshops to address the concerns of the community seniors.
- Serve as a trusted resource for information related to aging research, education, and healthcare.
- Expand education and outreach for community programs.
- Curate a list of expert speakers to educate the community.





## Center on Aging: **Education**

### **COVID-19 and the Elderly Community in South Carolina**

July 17, 2020

Dr. Heather Boger was interviewed by Brielle Smith, an MUSC Medical student and leader of the Community Vulnerability Project, to answer questions about how the pandemic is affecting seniors in the state.

[https://www.youtube.com/watch?v=\\_MI\\_rQvnDhA](https://www.youtube.com/watch?v=_MI_rQvnDhA)

### **Social Isolation in Older Adults During the Pandemic Interview**

August 20, 2020

Dr. Mark Newbrough spoke to Bobbi Conner on South Carolina Public Radio about the problem of social isolation in older adults during the pandemic.

<https://www.southcarolinapublicradio.org/health/2020-08-20/social-isolation-in-older-adults-during-the-pandemic>

### **Dietetic Internship**

September 2020 - February 2021

The Center on Aging was invited to participate in the Dietetic Internship Program and paired with intern, Mallory Sanford.

Under the directorship of Kelley Martin, MPH, RDN, LD, the dietetic internship, is designed to prepare students to become a “Registered Dietitian

Nutritionist” (RDN). Accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), upon completion, graduates are eligible to sit for the national RDN exam administered by the Commission on Dietetic Registration (CDR).

Program goals are preparing graduates with knowledge and skills to be competent dietitians and building leadership and public advocacy among the dietetics workforce, particularly in South Carolina.

The Center on Aging participated in this internship for the first time by providing a Capstone Project - a required component of the program. Mallory created a series of short videos on a variety of topics pertinent to seniors - such as the MIND diet, proper hydration, and eating healthy on a budget.

As a “research component”, we developed a survey to assess pre/post knowledge to test viewers to measure success outcomes of this project.

### **Hydration**

<https://youtu.be/LSzbiYTlB18>

### **MIND Diet**

<https://www.youtube.com/watch?v=q5adBTkMZMA>

### **5 Tips for Grocery Shopping on a Budget**

<https://www.youtube.com/watch?v=bQXdBoLy6S4>

# Center on Aging: **Education (continued)**

## **VA Virtual Symposium**

April 16, 2021

Dr. Vanessa Hinson and the MUSC Parkinson's Foundation Center of Excellence organized a symposium where participants learned about the latest treatment advances from Parkinson's experts and heard from Veterans who are now living with Parkinson's disease. They explored the resources and support services that Veterans have access to through the VA and the Parkinson's Foundation.

<https://www.youtube.com/watch?v=mhp8rfBNLHU>

## **Occupational Therapy Volunteers**

June 2021

The CoA assisted Dr. Joy Crawford in recruiting 51 volunteers (65 years or older) to work with occupational therapy students for a 30-minute interview. As part of the assessments, students asked thinking skills questions, inquired about falls, home environment, activity level, and general life satisfaction. The sessions were conducted via Zoom.

## **Senior Mentor Program**

June 2021

The CoA Newsletter described the College of Medicine Senior Mentor Program, its mission, and how to become a volunteer and work with medical students.

## **SC Safe Seniors**

June 2021

The CoA Newsletter shares the new name, but same mission of SC Safe Seniors (formerly Elder Abuse Identification and Prevention Program) and their Virtual Resource Fair in honor of World Elder Abuse Awareness Day.

## **MUSC's Back 2 Business Wellness Wednesday**

June 9, 2021

Dr. Heather Boger spoke about brain health on the June Wellness Wednesday Series. Audience members consisted of working individuals who may be seniors themselves, caring for a senior, or wanting to learn how to promote brain health for the future as they age.

<https://muschealth.org/medical-services/business-health/employer-resources/wellness-education?fbclid=IwAR2jRMrrta83gV8hjL3nEXG2cBHiHnrjWKYVSb0RWL7jyIFt5jMTUWUKmc0>

## **PD Monthly Lunch and Learns**

Ongoing

Dr. Vanessa Hinson and the MUSC Parkinson's Foundation Center of Excellence host monthly events, both in-person and virtually, to discuss Parkinson's Disease related topics.

<https://muschealth.org/medical-services/neurosciences/movement-disorders/resources>

## **Parkinson's Disease Newly Diagnosed Orientation**

Ongoing

Led by Dr. Christine Cooper and the MUSC Parkinson's Foundation Center of Excellence, MUSC provides an orientation to people within 1 year of their Parkinson's diagnosis. Topics include: Introduction to Parkinson's Disease and current treatment options, community resources, tips and recommendations from Occupational Therapy on Parkinson's Disease and work life, role of Physical Therapy in early Parkinson's Disease and overall importance of exercise, role of Speech Therapy in early Parkinson's Disease for speech, voice, swallowing and communication changes, overview of research in Parkinson's Disease, how to stay informed and get involved. Held every 2 months.

<https://muschealth.org/medical-services/neurosciences/movement-disorders/resources>

## **Parkinson's Disease Caregiver Assistance Program**

Ongoing

A two-hour caregiver class based on the premise of empowering family members or community members close to the people with Parkinson's Disease to be trained as volunteer caregivers. Topics include: motor and non-motor symptoms, psychological stressors, treatment options, safety and fall prevention, swallowing precautions, importance of medication compliance, coping, exercise, relaxation.

<https://muschealth.org/medical-services/neurosciences/movement-disorders/resources>



### MUSC Student Research Day

November 6, 2020

**Center on Aging Award for Excellence in Aging Research:**

**1st Prize Poster: [Stephanie DiLucia](#)**

Tau-spiracy- A developing Mechanism for Cardiac Dysfunction

**2nd Prize Poster: [DeMarcus Woolfork](#)**

AGE:RAGE Signaling Pathway as a Target in Neuroendocrine Prostate Cancer

**1st Prize Presentation: [Luke Watson](#)**

Brain Microvascular Insulin Receptor Dysfunction may Underly Increased Risk for Early Onset Dementia During Obesity

**2nd Prize Presentation: [Bryant Seamon](#)**

Revisiting the Concept of Minimal Detectable Change for the Activities-Specific Balance Confidence Scale with Individuals Post-Stroke

### CoA Newsletter Research Feature

September 2021

Dr. Catrina Robinson is a basic scientist whose research connects dementia to stroke. Dr. Robinson explores the impact of metabolic risk factors such as diabetes, obesity, insulin resistance, and high cholesterol on brain function, or memory and thinking skills.

### AARP Health Disparities Research Project

March 21, 2021

AARP South Carolina released the full Health Disparities: South Carolina Non-Hispanic Black People Aged 50+. Nowhere are these disparities clearer than the COVID-19 pandemic where Black people have suffered much higher case rates and nearly two and half times the mortality rate compared to White people. AARP SC commissioned the report in collaboration with the South Carolina Aging Research Network, Clemson University Institute for Engaged Aging, University of South Carolina Arnold School of Public Health and the Medical University of South Carolina Center on Aging.

<https://states.aarp.org/south-carolina/disrupthealthdisparities>

Researchers Addressing Numerous Healthy Disparities in Elderly African American Communities Press Conference

<https://www.live5news.com/2021/03/16/researchers-addressing-numerous-health-disparities-elderly-african-american-communities/?fbclid=IwAR0PTNNbdrUDFSKF9qfOULAXM8tCosszHbEm2GoWCIOutLORSP4VK9UFQmE>

### CoA Newsletter Research Feature

June 2021

Dr. Onder Albayram recently uncovered the previously unrecognized major early driver protein which linking vascular insults to Vascular Dementia (VaD) and Alzheimer's disease (AD), as reported in the Science Transitional Medicine.

## Center on Aging: **Research (continued)**

- Florez, H.** - Long-term effects of lifestyle and metformin interventions in DPP on bone density. *Osteoporos Int.* 2021 Jun 4. doi: 10.1007/s00198-021-05989-1. Online ahead of print. PMID: 34086101
- Florez, H.** - Association of Intensive Lifestyle and Metformin Interventions With Frailty in the Diabetes Prevention Program Outcomes Study. *J Gerontol A Biol Sci Med Sci.* 2021 Apr 30;76(5):929-936. doi: 10.1093/gerona/glaa295. PMID: 33428709
- Florez, H.** - Association of Baseline Characteristics With Insulin Sensitivity and  $\beta$ -Cell Function in the Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness (GRADE) Study Cohort. *Diabetes Care.* 2021 Feb;44(2):340-349. doi: 10.2337/dc20-1787. PMID: 33334808
- Florez, H.** - Circulating sex hormone binding globulin levels are modified with intensive lifestyle intervention, but their changes did not independently predict diabetes risk in the Diabetes Prevention Program. *BMJ Open Diabetes Res Care.* 2020 Dec;8(2):e001841. doi: 10.1136/bmjdr-2020-001841. PMID: 33328161
- Florez, H.** - The cross-sectional association of renal dysfunction with tests of cognition in middle-aged adults with early type 2 diabetes: The GRADE Study. *J Diabetes Complications.* 2021 Mar;35(3):107805. doi: 10.1016/j.jdiacomp.2020.107805. Epub 2020 Nov 26. PMID: 33288412
- Florez, H.** - Genetic Architecture of Abdominal Aortic Aneurysm in the Million Veteran Program. *Circulation.* 2020 Oct 27;142(17):1633-1646. doi: 10.1161/CIRCULATIONAHA.120.047544. PMID: 32981348
- Florez, H.** - Association of negative financial shocks during the Great Recession with depressive symptoms and substance use in the USA: the CARDIA study. *J Epidemiol Community Health.* 2020 Dec;74(12):995-1001. doi: 10.1136/jech-2020-213917. PMID: 32788306
- Florez, H.** - Venezuelan migrants in Colombia: COVID-19 and mental health. *Lancet Psychiatry.* 2020 Aug;7(8):653-655. doi: 10.1016/S2215-0366(20)30242-X. PMID: 32711697.
- Florez, H.** - The Relationship of Lean Body Mass With Aging to the Development of Diabetes. *J Endocr Soc.* 2020 30;4(7):bvaa043. doi: 10.1210/jendso/bvaa043. eCollection 2020 Jul 1. PMID: 32666006
- Florez, H.** - Is There an Association Between Metformin Exposure and Frailty? *Gerontol Geriatr Med.* 2020 15;6:2333721420924956. doi: 10.1177/2333721420924956. eCollection 2020 Jan-Dec. PMID: 32596419
- Florez, H.** - The Association of Frailty with Hospitalizations and Mortality among Community Dwelling Older Adults with Diabetes. *J Frailty Aging.* 2020;9(2):94-100. doi: 10.14283/jfa.2019.31. PMID: 32259183
- Hinson, V.** - The Parkinson Study Group SURE-PD3 Investigators (incl. Hinson VK). Effect of inosine on early Parkinson disease progression. Accepted for publication in *JAMA.* 6/2021.
- Hinson, V.** - Simuni T, Fiske B, Merchant K, Coffey CS, Klingner E, Caspell-Garcia C, Lafontant DE, Matthews H, Wyse RK, Brundin P, Simon DK, Schwarzschild M, Weiner D, Adams J, Venuto C, Dawson TM, Baker L, Kostrzebski M, Ward T, Rafaloff G; Parkinson Study Group NILO-PD Investigators and Collaborators. Efficacy of Nilotinib in Patients With Moderately Advanced Parkinson Disease: A Randomized Clinical Trial. *JAMA Neurol.* 2021 Mar 1;78(3):312-320. doi: 10.1001/jamaneurol.2020.4725. Erratum in: doi: 10.1001/jamaneurol.2021.0103. PMID: 33315105; PMCID: PMC7737147.
- Hinson, V.** - Farrand AQ, Verner RS, McGuire RM, Helke KL, Hinson VK, Boger HA. Differential effects of vagus nerve stimulation paradigms guide clinical development for Parkinson's disease. *Brain Stimul.* 2020 Sep-Oct;13(5):1323-1332. doi: 10.1016/j.brs.2020.06.078. Epub 2020 Jul 3. PMID: 32629028.
- Hinson, V.** - Parkinson Study Group STEADY-PD III Investigators. Isradipine Versus Placebo in Early Parkinson Disease: A Randomized Trial. *Ann Intern Med.* 2020 May 5;172(9):591-598. doi: 10.7326/M19-2534. Epub 2020 Mar 31. PMID: 32227247; PMCID: PMC7465126.



## Center on Aging: **Service**

### **Alzheimer's Association Walk to End Alzheimer's Committee Member**

July - November 2020

Kelly Franklin was a member of the Team Recruitment Committee and solicited new teams to sign up for the event.

### **Lowcountry Senior Network Notes to Seniors**

August 11, 2020

Kelly Franklin created note cards that members of LSN used to write uplifting notes to 100 homebound seniors, delivered by Meals on Wheels drivers to help with the social isolation brought on by the pandemic.

### **Alzheimer's Association Walk to End Alzheimer's**

November 7, 2020

The CoA compiled a team of walkers that raised \$755 for the SC Alzheimer's Association and participated in a virtual walk to raise awareness for the disease.

### **Lowcountry Senior Network Angel Tree**

December 8, 2020

Kelly Franklin chaired the Angel Tree Program that fulfilled the holiday wish lists of over 40 socially isolated seniors.

### **HealthLinks Wellness Fair**

March 12, 2021

Kelly Franklin attended health fair at Del Webb Charleston at Nexton and distributed information to residents about aging related MUSC programs.

### **Moving Day**

March 2021

Jean Dangerfield, Nicole Cool, and Dr. Vanessa Hinson from the MUSC Parkinson's Foundation Center of Excellence were part of the planning committee and team recruitment committee for the Parkinson's awareness "Moving Day" 2021.

### **Emergency Senior Supply Drive**

Ongoing

The MUSC Center on Aging partnered with the Trident Area Agency on Aging to organize and distribute food and supplies to lowcountry seniors, due to the impact of the COVID-19 pandemic.

### **World Health Organization (WHO/PAHO)**

Ongoing

Dr. Hermes Florez participates in discussions strategies for the implementation of the decade for healthy aging, including the Integrate Care for Older People (ICOPE) in the Americas as well as the evaluation of an indicator for dependency and care-giver support needed for older adults in several countries of the Americas and proposal for goals over the next 5-10 years.

### **Department of Veterans Affairs**

Ongoing

Dr. Hermes Florez is a member of the advisory committee of the Geriatric Research, Education, Clinical Center (GRECC) program in South Florida.





[www.musc.edu/aging](http://www.musc.edu/aging)

280 Calhoun Street, QF309C  
MSC 142  
Charleston, SC 29425

Interim Director:  
Dr. Heather Boger  
[boger@musc.edu](mailto:boger@musc.edu)

Administrative Coordinator:  
Kelly Franklin  
[dillonk@musc.edu](mailto:dillonk@musc.edu)  
843-792-0712

## THE MEDICAL UNIVERSITY OF SOUTH CAROLINA

Founded in 1824 in Charleston, The Medical University of South Carolina is the oldest medical school in the South. Today, MUSC continues the tradition of excellence in education, research, and patient care. MUSC educates and trains more than 3,000 students and residents, and has nearly 13,000 employees, including approximately 1,500 faculty members.

The Center on Aging is a research, service, and education center at the Medical University of South Carolina. The center was approved by the South Carolina Commission on Higher Education December 3, 1987, giving it the status of the oldest research center at the University.

Under the leadership of Interim Director, Dr. Heather Boger, the Center on Aging is committed to promoting health, longevity and improving the quality of life for South Carolina's seniors.

Changing What's Possible