The South Carolina Center for Gerontology, is a consortium of Clemson University, Coastal Carolina University, the Medical University of South Carolina, South Carolina State University, the University of South Carolina, Winthrop University, Lander University, Department of Health and Human Services, AARP South Carolina, South Carolina Department of Health & Environmental Control, South Carolina State Budget & Control Board, South Carolina Hospital Association and South Carolina Silver Haired Legislature. For more information about the Center, please visit our website: https://sc.edu/study/colleges_schools/ Socialwork/research/research_centers_ and_institutes/sc_center_for_gerontolog y/index.php

2019

ELECTRONIC NEWSLETTER

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Director's Message

Dear Colleagues,

As we know, the "silver tsunami" has arrived. Currently, the United States has 46 million people age 65 or above and the number will reach 98 million by 2060. An aging population also means a less physically mobile population, as challenges in mobility increase from 11 percent among those ages 50-64 to 43 percent among those age 80 and above. Although more than 78% of households headed by individuals aged 65 and over own their homes, very few homes are adequately equipped for mobility difficulties. Most homes were, and continue to be, designed for young families, lacking consideration for the needs of seniors. Only 3.5 percent of homes are equipped with the three basic features to accommodate those with mobility challenges: step-free entrances, single-floor living, and extra-wide doors and halls. Seniors may own their homes but struggle to continue living in them.

One of the solutions to the senior housing crisis is for the government to provide financial assistance to retrofit homes to be more livable for seniors. In South Carolina, governmental home repair and modification assistance is often offered through regional offices, such as Accessible Mobility Centers and area offices of Community Long Term Care. These assistance programs target structural changes to the homes of seniors (or individuals with disabilities) to enable individuals to live independently in their own homes by adding, for example, stair glides, wheelchair lifts, and ramps. It is quite amazing that such relatively simple changes can allow many elders to age in place!

Best Regards,

Rita Jing-Ann Chou, PhD, MSSW Hartford Geriatric Social Work Faculty Scholar Associate Professor College of Social Work University of South Carolina

(*Sources: See p.15)

Recent Grants/Funding (2018)

Dye, C. Clemson University Institute for Engaged Aging. S. Levkoff and D. Friedman, Co-PIs, University of South Carolina. Carolina Center on Alzheimer's Disease and Minority Aging Research (CCADMR). RFA: Alzheimer's-related Resource Centers for Minority Aging Research, NIH P30, number AG-18-002. CU Subaward \$61,625 (Direct \$40,410, Indirect \$21,215). Funded. 2018 – 2023

Dye, C. Clemson University Institute for Engaged Aging. M. Bailey, PI, Prisma Health System. Evaluation of Memory Health Service Expansion-Anderson/Oconee/Pickens. The Duke Endowment Foundation. I will mentor a doctoral student to: Assist in data analysis and program evaluation; Support program dissemination via scholarly publications; Evaluate program implementation and support program fidelity: Support program planning. Funded. \$60,000. 2018 – 2020

Dye, C. Clemson University Institute for Engaged Aging. Trainer. Principal Investigators – M. Parisi and W. Sherrill. Diabetes Prevention and Management initiative. Greenville Health Authority board. \$2.66 million. Funding of \$5000 per year for training. 2017-2022

Dye, C. Clemson University Institute for Engaged Aging, Co-PI with M. Van Puymbroeck. Ready for STEADI? A Fall Prevention Initiative. K. Kemper (CU), S. Sasser (GHS), Co-Investigators. Goal of the project is to facilitate the environmental and system level changes needed to institutionalize a fall prevention screening, referral and intervention process in a small rural hospital (Oconee Memorial Hospital). Pete and Sally Smith Foundation. \$25,000. 1-1-2018 to 12-31-2018, no-cost extension 1-2019 to 12-2019.

Davis, N. Clemson University Clemson University Institute for Engaged Aging, School of Nursing. Role: Co-PI. Bailey-Taylor, Melissa, Prisma Health-Upstate. "Understanding the Perspectives and Needs of African-American and Latino Caregivers of Persons with Alzheimer's Disease and Related Dementias in Upstate South Carolina", GHS Health Science Center \$18,240 (2019-2020).

Davis, N. Clemson University Clemson University Institute for Engaged Aging, School of Nursing. S. Levkoff and D. Friedman, Co-PIs, University of South Carolina. Carolina Center on Alzheimer's Disease and Minority Aging Research (CCADMR). RFA: Alzheimer's-related Resource Centers for Minority Aging Research, NIH P30, number AG-18-002. Role: Pilot Project PI. CU Subaward \$29, 998 (Direct \$27,776, Indirect \$2,222). Funded. 2018 – 2019.

Davis, N. Clemson University Institute for Engaged Aging, School of Nursing. "Development of a Web-based Telehealth Program to Support Family Caregivers of Older Adults with Urinary Incontinence", (Role: PI), Clemson University, College of Behavioral Social and Health Sciences, (\$26,244). (2017-2019).

Policy Board South Carolina Center for Gerontology

Mrs. Judy Baskins Palmetto Health Geriatric Services

Dr. Maureen Dever-Bumba Florence-Darlington Technical College

Mr. Pete Bailey South Carolina State Budget & Control Board

Dr. Cheryl Dye Director Institute for Engaged Aging Clemson University

Dr. Heather Boger Interim Director Center on Aging Medical University of South Carolina

Dr. William E. Hills Coastal Carolina University

Dr. Jerome E. Kurent Medical University of South Carolina

Mr. Tom Lloyd South Carolina Silver Haired Legislature

Ms. Carrie Sinkler-Parker AARP of South Carolina

Dr. Tim Snyder Lander University

Dr. Jennifer C. Solomon Chair Winthrop University

Dr. Meredith J. Uttley Lander University **Davis, N.** Clemson University Institute for Engaged Aging, School of Nursing. "Exploring the Use of Social Media & Internet-based Recruitment to Reach Informal Caregivers of Persons with Urinary Incontinence", (Role: PI), 2016 Mary M. Lohr Faculty Endowment Fund, Clemson School of Nursing, (\$7,998). (2016-2019).

DesJardins, J. Clemson University Institute for Engaged Aging. Translational Partnerships in Biomedical Capstone Design, Principal Investigator, \$213,300, 05/1/2014 - 04/30/2019

DesJardins, J., Clemson University Institute for Engaged Aging. NIH: South Carolina Bioengineering Center of Regeneration and Formation of Tissues (SC BioCRAFT), Principal Investigator: Naren Vyavahare, Key Collaborator, 5%, \$11,076,492, 7/1/14-6/30/19

DesJardins, J., Clemson University Institute for Engaged Aging . NIH: South Carolina Bioengineering Center of Regeneration and Formation of Tissues (SC BioCRAFT), Targeted Project 1: Developing Luminescent Strain Sensors to Evaluate and Monitor Osteoinductive Therapies, Principal Investigator: Jeffery Anker, Co-PI: John DesJardins, 25%, \$750,218, 7/1/14-6/30/19

DesJardins, J., Clemson University Institute for Engaged Aging. NIH, R01, Detecting and Monitoring Implant Infection with X-ray Excited Luminescence Chemical Imaging (XELCI), PI. Dr. Jeff Anker, Co-Investigator 20%, \$1,789,611, 7/11/2016-6/30/2021

DesJardins, J. Clemson University Institute for Engaged Aging. Hawkins Foundation: (Arthrex): Micromotion and Strength of the Glenoid Component in Reverse Shoulder Arthroplasty: The Effect of Malpositioning vs. Optimum VIP Positioning in the Simulated B2 Glenoid, \$39,189, 1/15/2018-1/14/2019

DesJardins, J. Clemson University Institute for Engaged Aging. Milliken Healthcare: Pressure Measurements of Compression Wrappings, Phase I, \$34,824, 01/25/2018-04/30/2018

DesJardins, J. Clemson University Institute for Engaged Aging. Reify, LLC., Analysis of Socket Strength Testing 3D Printed Trans-Tibial Prosthetic Sockets, Principal Investigator, Part 1, \$1,500. 4/23/2018

DesJardins, J. Clemson University Institute for Engaged Aging. Reify, LLC., Analysis of Socket Strength Testing 3D Printed Trans-Tibial Prosthetic Sockets, Principal Investigator, Part 2, \$1,627. 6/15/2018

DesJardins, J. Clemson University Institute for Engaged Aging. American Orthotic & Prosthetic Association, The Quantification of Containment Conditions Used for Directed Growth Within Infant Cranial Remolding Orthoses: A Pilot Study, Principal Investigator, \$14,900, 09/15/2018 to 09/14/2019

DesJardins, J. Clemson University Institute for Engaged Aging. GHS Health Sciences Center, Transformative Seed Grant Program, The Use of Patient-Specific 3D Printed Anatomic Models in Pre-Operative Planning and Patient Engagement to Improve Hip Arthroscopy Outcomes, Principle Investigator, \$19,958, 04/1/19 to 03/31/20

DesJardins, J. Clemson University Institute for Engaged Aging. Robert H. Brooks Sports Science Institute Seed Grant, The Effect of Balance on Internal Swing Consistency: An Athletic Partnership in Movement Science, Principle Investigator, \$39,002, 02/15/19 to 05/30/20

DesJardins, J. Clemson University Institute for Engaged Aging. U.S. Economic Development Adminstration, U.S. Department of Commerce, Through the South Carolina Regional Authority (SCRA), South Carolina Medical Device Alliance, Co-PI, \$1,814,846, 03/01/19 to 02/28/22

Friedman, D.B., Wilcox, S., & Pearson, J.L. (South Carolina Healthy Brain Research Network). "Healthy Brain Research Network (HBRN) Scholar Program: University of South Carolina HBRN Collaborating Center". Alzheimer's Foundation of America, \$20,000 (September 1, 2018 – August 31, 2019).

Levkoff, S.E., & Friedman, D.B. Multiple Principal Investigators. Carolina Center on Alzheimer's Disease and Minority Research (CCADMR). National Institute on Aging, Alzheimer's Diseaserelated Resource Center on Minority Aging Research (P30 AG059294-01), \$3,196,121 (September 1, 2018) – June 30, 2023).

Levkoff, S. (University of South Carolina). Social Technology for Eldercare in China: A Transdisciplinary Collaborative Research-Education Program. Harvard Global Institute, (2018-2020).

Levkoff, S. (University of South Carolina). Social Technology for Eldercare in China Initiative (Phase I). Jiangsu Industrial Technology Research Institute (JITRI), China. (2017-2018).

Luo, Y. Clemson University, Institute for Engaged Aging (IEA) Pilot Project Program, Clemson University, with Lingling Zhang (Co-PI): \$5000. "Neighborhood Environment and Cognitive Decline among Older Adults in China: Evidence from China Health and Retirement Longitudinal Study (CHARLS)"/ 2017-2018.

McCubbin, J., Clemson University Institute for Engaged Aging, Principal Investigator, National Institutes of Health, 1 R13 CA216984 (\$15, 580) Academy of Behavioral Medicine Research Annual Conference. This small conference grant focused on cutting-edge research in cancer, coronary heart disease, diabetes, and other top chronic disease killers. 2017-2018.

Taylor, M.A., Clemson University Institute for Engaged Aging, & Bisson, J. Shifts in Information Processing and Cognitive Abilities and Implications for Training Older Learners. Funded by the AARP Foundation. 2018.

Recent Presentations (2018)

Adams, E.V., Walter, A.A., & Van Puymbroeck, M. Clemson University Institute for Engaged Aging, Crowe, B.M., Sharp, J., Hawkins, B.L., Schmid, A.A. (October, 2018). Influence of yoga on non-motor symptoms of Parkinson's disease. Symposium on Yoga Research. Stockbridge, MA.

Bales, C.E., Helms, S.M. , & DesJardins, J.D. Clemson University Institute for Engaged Aging. Surface Characterization of Metallic Implants Created with a Novel Biofilm-Resistant Surface Modification Process, Poster, Biomedical Engineering Society, October 17-20, 2018. Atlanta, GA.

Behbahani, S.B., Helms, S., & DesJardins, J.D.

Clemson University Institute for Engaged Aging, M.S. Kennedy, T. Bruce, J. Tzeng, Characterization of Surface Modified Orthopedic Implants for their Antimicrobial Properties, The American Society for Microbiology, June 7-11, 2018, Atlanta, GA.

Belle, L., Xi, Y., Brooks, J., Vanhovens, P., McConomy, S., & DesJardins J. J. Clemson University Institute for Engaged Aging, Rosopa, K. Kopera, C. Truesdail, N. Drouin, S. Hennessy, S. Tanner, J. McKee, K. Lococo, Understanding Pedal Usage and Foot Movement Characteristics of Older Drivers, Greenville Health System Health Sciences Center Research Showcase, Poster #7, April 13, 2018, Greenville, SC.

Belza, B., Croff, R., Friedman, D.B., Karlawish, J., Marquez, D.X., McGuire, L., & Mohler, J. (South Carolina Healthy Brain Research Network: SC-HBRN). Healthy Brain Research Network: Leveraging expertise for public health wins. 146th Annual Meeting of the American Public Health Association, San Diego, CA. (November 10-14, 2018).

Bina, A., Balthaser, A., Wright, N., Batt, G.S., & DesJardins, J.D. Clemson University Institute for Engaged Aging. The Relationship Between Structural Stiffness and Impact Performance of the American Football Faceguard, Oral Presentation, Biomedical Engineering Society, October 17-20, 2018. Atlanta, GA.

Carrington, N., Milhouse, P., Behrend, C., Pace, T., Anker, J., & DesJardins, J. Clemson University Institute for Engaged Aging. A Cadaveric Model for Passive Strain Sensing in Dynamic Hip Screws to Measure Fracture Stability, Biomedical Engineering Society, October 17-20, 2018. Atlanta, GA.

Carrington, N., Kunkle, B., Behrend, C., Pace, T., Millhouse, P., Anker, J., & DesJardins, J. Clemson University Institute for Engaged Aging. An Integrated Passive Strain Sensor for Dynamic Hip Screws to Monitor Intertrochanteric Fracture Stability with Radiography, Greenville Health System Health Sciences Center Research Showcase, Poster #10, April 13, 2018, Greenville, SC

Carrington, N., Kunkle, B., Behrend, C., Pace, T., Millhouse, P., Anker, J., & DesJardins, J.D. Clemson University Institute for Engaged Aging. An Integrated Passive Strain Sensor for Dynamic Hip Screws to Monitor Intertrochanteric Fracture Stability with Radiography, Poster# 0910, Proceedings of the Annual Meeting of the Orthopaedic Research Society, Poster#0910, March 10 -March 13, 2018, New Orleans, LA.

Chou, R. J. (University of South Carolina). When Chinese adult children do not support elderly parents – what would parents do? Poster presented at the 71 Annual Scientific Meeting of the Gerontological Society of America, Boston, Massachusetts, November 14, 2018.

Crowe, B.M., Adams, E.V., & Van Puymbroeck, M. Clemson University Institute for Engaged Aging, Walter, A.A., & Schmid, A.A. (October 2018). Effects of participation in standing and seated yoga classes on physical functioning in community-dwelling older adults. Symposium on Yoga Research. Stockbridge, MA.

Davis, N, Clemson University Institute for Engaged Aging, Scharett, E, Narasimha, S, et. al. "Informational Needs of Patients with Incontinence on Online Peer Support Groups- A Pilot Study", Paper Presentation, Human Factors and Ergonomics Society's 2018 International Annual Meeting. Philadelphia, PA.

Davis, N.J., Clemson University Institute for Engaged Aging, Clark, P.C., Johnson, T.M., Wyman, J.F., "Using Telehealth to Support Informal Caregivers of Elders with Urinary Incontinence", Poster Presentation, NIH-NIDDK Scientific Meeting: Individualizing Urinary Incontinence Treatment: Evolving Research Questions to Research Plans, Bethesda, MD (2018).

Dean, D., & DesJardins, J.D. Clemson University Institute for Engaged Aging. Demonstrating the Viability of Using Zinc-Air Batteries in Oxygen Sensors for Low-Resource Settings, Biomedical Engineering Society, October 17-20, 2018. Atlanta, GA.

DesJardins, J. D. Clemson University Institute for Engaged Aging, S. Ehmann, K. Walker, A.M. Holter, C. Bailey, An in-vitro Pressure Mapping Evaluation of Fuzzy Wale Compression with Multi-Layered Compression, Symposium for Advanced Wound Care, April 25–29, 2018, Charlotte, NC.

DesJardins, J.D. Clemson University Institute for Engaged Aging, Cátedra Industria 4.0, Jornada y workshop: Oportunidades en impresión aditiva. Sector Salud, "3D Printing In Orthopaedics And Rehabilitation Research", May 18, 2018, Pamplona, Spain.

DesJardins, J.D. Clemson University Institute for Engaged Aging, C. Bales, S. Helms, Wettabilty of a Novel Biofilm-Resistant Surface Modification Process for Metallic Implants, Bone and Joint Journal, ISTA 2017 Conference Supplement.

DesJardins, J. Clemson University Institute for Engaged Aging, M. Stokes, L. Pietrykowski, T. Gambon, B. Greene, C. Bales, A Novel Total Knee Replacement That Incorporates Synthetic Ligaments To Influence Knee Stability, Bone and Joint Journal, ISTA 2017 Conference Supplement.

DesJardins, J. D. Clemson University Institute for Engaged Aging, P.W. Millhouse; Md. Arifuzzaman; A.C. Rajamanthrilage; N.T. Carrington; C. Behrend; J.N. Anker, Novel Cervical Interbody Spacer to Detect Fusion Radiographically, International Society for Technology in Arthroplasty October 10-13, 2018, London, UK

DesJardins, J. D. Clemson University Institute for Engaged Aging, E.M. Lucas, K. Chillag, F. Voss, The ENGAGE Locking Knee Implant: A TKR System for Use as an Alternative to Knee Arthrodesis, International Society for Technology in Arthroplasty October 10-13, 2018, London, UK.

Drouin, N., McConomy, S., Brooks, J., Vanhovens, P., Xi, Y., Rosopa, P., & DesJardins, J., Clemson University Institute for Engaged Aging, K. Kopera, L. Belle, C. Truesdail, S. Tanner, K. Lococo, L. Staplin, E.S. Davis, Evaluation of CarFit Criteria Compliance and Knowledge of Seat Adjustment, Greenville Health System Health Sciences Center Research Showcase, Poster #17, ApriOptimal Clinical Positioning In The Simulated B2 13, 2018, Greenville, SC

Fladd, J., Pellizzi, N., Sharpe, R., Magrath, G., & DesJardins, J.D. Clemson University Institute for Engaged Aging, Development of Rupture Testing Methodology for Eyeballs Using Intraocular Pressurization, ARVO Annual Meeting, Apr 29 - May 03, 2018, Honolulu, Hawaii.

Friedman, D.B., Pearson, J.L., & Spencer, S.M. (Arnold School of Public Health Office for the Study of Aging: OSA). Building a National Alliance of Academic Centers for Research on Healthy Aging. 70th Annual Scientific Meeting of the Gerontological Society of America, Boston, MA. (November 14-18, 2018).

Hall, S., Baxley, D., Kissenberth, M., Karnes, J.,

Metcalte, N., & DesJardins, J. Clemson University Institute for Engaged Aging. Micromotion and strength of the Holter, A. M., Gates, J., & J.D. Des Jardins. Clemson glenoid component in reverse total shoulder arthroplasty: the effect of malpositioning vs optimum VIP positioning in the simulated B2 glenoid, Greenville Health System Health Sciences Center Research Showcase, Poster #27, April 13, 2018, Greenville, SC.

Hall, S.M., Baxley, D., Kissenberth, M., Karnes, J., Metcalfe, N., & DesJardins, J.D. Clemson University Institute for Engaged Aging. Micromotion And Strength Of The Glenoid Component In Reverse Total Shoulder Arthroplasty: The Effect Of Malpositioning Versus Optimal Clinical Positioning In The Simulated B2 Glenoid, American Shoulder and Elbow Surgeons, October 11-14, 2018, Chicago, IL.

Holter, A.M., Gates, J., Luzum, N., Vernon, K., Van Puymbroeck, M., & DesJardins, J.D. Clemson University Institute for Engaged Aging. Biomechanical relation between horse and rider in therapeutic horseback riding and its effect on balance in elderly, Biomedical Engineering Society, October 17-20, 2018. Atlanta, GA.

Hall, S.M., Baxley, D., Kissenberth, M., Karnes, J., Metcalfe, N., & DesJardins, J.D. Clemson University Institute for Engaged Aging. Micromotion And Strength Of The Glenoid Component In Reverse Total Shoulder Arthroplasty: The Effect Of Malpositioning Versus Glenoid, Biomedical Engineering Society, October 17-20, 2018. Atlanta, GA.

Hein, L.C., Dickson, L., Nanna, A., Taylor, M., & Spencer, S.M. (OSA). Retiring to the Closet: Southern Lesbian, Gay, Bisexual, and Transgender Elders and Long-Term Care. 39th Annual Southern Gerontological Society/Georgia Gerontological Society Joint Conference, Buford, GA. (April 13, 2018).

Holter, A.M., Gates, J., DesJardins, J.D., Vernon, K., & Van Puymbroeck, M. Clemson University Institute for Engaged Aging. Biomechanical relationship between horse and rider in a therapeutic riding setting and its effect on balance confidence in elderly, PATH International Conference and Annual Meeting, October 25-27, 2018. Orlando, FL.

University Institute for Engaged Aging, K. Vernon, M. Van Puymbroeck Biomechanical effects of therapeutic horsback riding on balance and gait confidence in eldery, Greenville Health System Health Sciences Center Research Showcase, Poster #31, April 13, 2018, Greenville, SC

Johari, K. (OSA). Age-Related Changes in Temporal Processing Mechanisms of Speech Production and Hand Movement: An ERP Study. Georgia Institute of Technology Cognitive Aging Conference, Atlanta, GA. (May 3-6, 2018).

Levkoff, S. (University of South Carolina). Caring for older Thai adults with dementia. Ministry of Public Health of Thailand, Bangkok, Thailand. (2018).

Levkoff, S. (University of South Carolina). The Emerging Field of Gerontechnology: The Interface of Social Gerontology, Geriatric Medicine, and Engineering. Taiwan Health Movement Alliance, Taiwan. (2018).

Levkoff, S. (University of South Carolina). Interprofessional Education (IPE) and Interprofessional Practice (IPP) in Care of Older Adults: The Time Has Come. Nanjing, China. (2018).

Liu, P. Powers, M. & Dye, C.J. Clemson University Institute for Engaged Aging. Exhibiting Culture in the Care Environment: Comparing **Retirement Communities in the United States** and China. Podium presentation. Environmental Design Research Association (EDRA). Oklahoma, OK: June, 2018.

Marquez, D.X., Basia, B., Croff, R., Friedman, D.B., Karlawish, J., & Mohler, J. (SC-HBRN). The Healthy Brain Research Network: Collective Impact in Action. 70th Annual Scientific Meeting of the Gerontological Society of America, Boston, MA. (November 14-18, 2018).

Miller, M., & Pearson, L. (OSA). The South Carolina Alzheimer's Disease Registry: A unique asset for statewide surveillance and research. Alzheimer's Association Research Conference: The Power of You, Columbia, SC. (November 9, 2018).

Miller, M., Wolfe, B., Rahimi, G., & Smith, M. (OSA). Addressing End-of-Life Care in Physician's Practices: An Innovative Pilot Study in South Carolina. American Society on Aging's 2018 Aging in America Conference, San Francisco, CA. (March 26-29, 2018)

Millhouse, P.W., Arifuzzaman, M, Rajamanthrilage, A.C., Carrington, N.T., Behrend, C., & DesJardins, J.D. Clemson University Institute for Engaged Aging, J.N. Anker, Cervical Interbody Spacer with Passive Radiographic Fusion Status Indicator, North American Spine Society (NASS), September 26-29, 2018, Los Angeles, CA.

Millhouse, P.D., Arifuzzaman, M., Rajamanthrilage, A.CLimb Salvage Outcomes, Military Health Sciences Carrington, N.T., Behend, C., & DesJardins, J.D. Clemson University Institute for Engaged Aging, J.N. Anker, Cervical Interbody Spacer with Passive Radiographic Fusion Status Indicator, Greenville Health System Health Sciences Center Research Showcase, Poster #41, April 13, 2018, Greenville, SC.

Millhouse, P.W., Arifuzzaman, M., Rajamanthrilage, A.C., Carrington, N.T., Behrend, C., & DesJardins, J.D. Clemson University Institute for Engaged Aging, J.N. Anker, Detecting Fusion On Radiographs: Cervical Interbody Spacer With Passive Fusion Status Indicator, Cervical Spine Research Society, December 5, 2018, Scottsdale, AZ

Natarajan, O., Cao, M., & Dong, Y. Clemson University Institute for Engaged Aging. "p38 MAPK, insulin signaling and Wnt signaling pathway are required for royal jelly mediated response to immunosenescence in C. elegans against S.aureus." C. elegans topics meeting: Stress Pathogenesis Ageing Metabolism Small RNA (SPAMS), Madison, WI (June 2018).

Natarajan, O., Cao, M., Dong, Y. Clemson University Institute for Engaged Aging. "Royal Jelly Promotes Survival of Caenorhabditis elegans Through Known Immune and Stress Response Pathways Against Gram Positive and Gram Negative Pathogens." ASM Microbe 2018, Atlanta, GA, (June 2018).

Natarajan, O., Cao, M., & Dong, Y. Clemson University Institute for Engaged Aging. ""Royal jelly retards immunosenescence in C. elegans against S. aureus infection through p38 MAPK, insulin signaling and Wnt signaling pathway." Nathan Shock Symposium on basic biology of aging, UAB, Birmingham, AL (April 2018).

O'Neill, L., B. Twomey, D., Helms, S., Bales, C., Beladi-Behbahani, S., Smith, N., Tanner, S., Tzeng, T., Kennedy, M., Jeray, K., & DesJardins, J.D. Clemson University Institute for Engaged Aging. Preventing Infection by Surface Modification of Orthopaedic Fracture Fixation Implants for Improved Research Symposium, Abstract # MHSRS-18-0755 - ID - Minimizing the Impact of Wound Infections Following Blast-Related Injuries, August 20-23, 2018, Kissimmee, FL.

Owen, M.K., DesJardins, J. D. Clemson University

Institute for Engaged Aging. Transtibial Prosthetic Socket Strength: Comparison of Standard and 3D Printing Fabrication Methods, Biomedical Engineering Society, October 17-20, 2018. Atlanta, GA.

Owen, M., Squibb, C., Doepke, B., Philen, M., Kaluf, B., & DesJardins, J.D. Clemson University Institute for Engaged Aging. Trans-Tibial Prosthetic Socket Surface Strain with ISO-10328 Loading, Proceedings of the 2018 American Academy of Orthotists & Prosthetists, Oral Presentation, F60, February 14 – 17, 2018, New Orleans, LA.

Pering, C.H., & Van Puymbroeck, M. Clemson University Institute for Engaged Aging, Crowe, B., Schmid, A.A. (2018) The influence of yoga on people with traumatic brain injury related to sleep and mood. American Therapeutic Recreation Association, Grand Rapids MI. September 2018.

Putman, B., & DesJardins, J.D Clemson University Institute for Engaged Aging. Design Thinking: Playful Problem Solving, 2018 Conference of the Value of Play, The Many Faces of Play, April 8-11, 2018, Clemson, SC.

Richardson, W., Tam, H., Booth, B., Cash, H., Owen, M., Kohn, J., Przestrzelski, B., Mkongwa, K., Melkoire, U., Msafiri, N., & DesJardins J.D. Clemson University Institute for Engaged Aging, D. Dean, International Academic Partnership for Diverse Bioengineering Design Education, World Congress of Biomechanic, July 8-12 2018, Dublin, Ireland.

Scharett, E., Narasimha, S., & Chalil Madathil, K. Clemson University Institute for Engaged Aging, Wilson, M., Davis, N. & Dye, C., Clemson University Institute for Engaged Aging . (2018, October). Informational needs of urinary incontinent patients on online peer support groups- a pilot study. In Proceedings of the 2018 Human Factors and Ergonomics Society Annual Meeting, Philadelphia, PA.

Teixeira, A., & Spencer, M. (OSA). Dispelling the Myth of Achieving Work-Life Balance as a Caregiver. 2018 USC Women's Leadership Institute, Columbia, SC. (April 25, 2018).

Choi, S.K., & Friedman, D.B. (SC-HBRN). Health information seeking behaviors among caregivers of individuals with Alzheimer's disease and related dementias. University of South Carolina Discover Day, Columbia SC. (April 20, 2018).

Torphy, H. S., & Van Puymbroeck, M.

Clemson University Institute for Engaged Aging, Crowe, B., Schmid, A.A., Adams, E. V., Hubbard, C., Wiles, A., Park, J., & Kelly, C. (2018) Yoga for People with Intellectual and Developmental Disabilities: A Pilot Study. American Therapeutic Recreation Association, Grand Rapids MI. September 2018.

Van Puymbroeck, M. Clemson University Institute for Engaged Aging, Walter, A.A., Hawkins, B.L., Woschkolup, K., Urrea-Mendoza, E. Revilla, F., Sharp, J., Adams, E.V., Crowe, B.M., & Schmid, A.A. (October, 2018). Yoga improves postural stability and balance control for people with Parkinson's disease. Symposium on Yoga Research, Stockbridge, MA.

Walter, A.A., & Van Puymbroeck, M.

Clemson University Institute for Engaged Aging, Townsend, J., Linder, S.M., & Schmid, A.A. (2018). A mixed methods study on therapeutic yoga for informal caregivers. American Therapeutic Recreation Association Research Institute. Grand Rapids, MI.

Walker, K., Owen, M., & DesJardins, J.D. Clemson University Institute for Engaged Aging. Additive Manufacturing of Variable Hardness Materials for use in Pressure Offloading, Meeting of the South East Medical Device Association (SEMDA) MedTech Conference, May 3-4, 2018, Greenville, SC

Walker, K., Bailey, C., Ehmann, S., & DesJardins, J.D. Clemson University Institute for Engaged Aging. An in-vitro Pressure Mapping Evaluation of Fuzzy Wale Compression with Multi-Layered Compression, Poster, Biomedical Engineering Society, October 17-20, 2018. Atlanta, GA.

Recent Publications (2018)

Charles, V. A., & Wolfer, T. A. (2018). Loneliness and congregational social work. *Social Work & Christianity*, 45(1), 8–23.

Choi, S. K., Rose, I. D., & Friedman, D. B. (2018 Nov 25 Epub). How is literacy being defined and measured in dementia research? A scoping review. *Gerontology and geriatric medicine*, 4. DOI: 10.1177/2333721418812246

Choi, S. K., Yelton, B., Ezeanya, V. K., Kannaley, K., & Friedman, D. B. (2018 July 26 Epub). Review of the content and quality of mobile applications about Alzheimer's disease and related dementias. *Journal of Applied Gerontology*. DOI: 10.1177/0733464818790187

Crouch, E., Probst, J. Bennett, K, and Eberth, J.

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Organization / Agency News

The First Annual Arnold Aging Lecture

The first annual Arnold Aging Lecture was held on March 29, 2018 at the University of South Carolina Alumni Center. Dr. Kenneth Langa from the University of Michigan gave the keynote presentation. Researchers and community partners also participated in small group meetings with Dr. Langa.

South Carolina Aging Research Network (SCARN) – Update of activities 2018-2019

By Dr. Cheryl Dye, Director of CU Institute for Engaged Aging

SCARN was formed in 2006 by representatives of MUSC, USC, Clemson University and Palmetto Health. Later, representatives from Furman University, Greenville Health System (now Prisma Health) and the South Carolina Institute for Medicine and Public Health were added. The SCARN Chair position has rotated among member organizations according to who was hosting the annual Aging Research Day. In 2018 the group decided to step back from hosting this annual conference to discuss how time and resources might be better used.

Dr. Cheryl Dye, Director of the CU Institute for Engaged Aging, led SCARN representatives in discussions throughout 2018 and into 2019. Based on these discussions, the group decided to focus on the goal of promoting healthy lifestyles of rural older adults through increasing delivery of Evidence-Based Programs (EBPs) in rural AAA provider sites such as Councils on Aging (CoA). One identified strategy for accomplishing this goal is to develop a PR campaign to promote messages to policy-makers and other target audiences about the need to support rural AAA provider sites and messages targeting rural older adults encouraging them to participate in EBPs. To this end, the following research questions for various stakeholders were developed by Dr. Stephanie Pangborn with the CU Institute for Engaged Aging:

Policy makers and local officials

- How do individuals in government leadership positions understand the "brand" of AAA provider sites (purpose, role, services, necessity)
- In what ways does this perception guide financial support of AAA provider sites?

<u>State Office on Aging staff and Senior center</u> <u>directors</u>

- How do individuals working within the context of older adult community care articulate the "brand" of AAA provider sites (purpose, role, services, necessity)?
- What do individuals working within the context of older adult community care perceive to be the most pressing needs in terms of image management and financial support?

Rural older adults

- How do rural older adults perceive the "brand" of AAA provider sites (purpose, role, services, necessity)?
- What motivates rural older adults to engage in, or not participate in, the services provided by AAA provider sites?
- What value do rural older adults see in EBPs such as Chronic Disease Self-Management Education (CDSME) and fall prevention programs?
- How does rural older adults' participation in CDSME and fall prevention EBPs vary by sociodemographic characteristics, such as gender, race/ethnicity, and SES? And, how might different messages activate older adults in these various groups?

Finlay House

By Mr. Russ Bell, MPH, Executive Director

Planning for the Finlay House began in 1968 and then was opened in 1973. The building is 19 stories and has 204 apartments. Finlay House operates as a Department of Housing and Urban Development (HUD), project based Section 8 property for the elderly. Our mission is to provide safe, secure and affordable housing to people sixty-two years old and older.

Rents paid by tenants are based on the tenant's income and is approximately 30% of the tenants income. The remainder of the rent is paid by HUD. The rent includes electricity, gas, water and sewer. Other



services provided are transportation, activities and maintenance. The Finlay House also has an agreement with the Lourie Center that allows for access to fitness equipment and classes of interest to our tenants.

The Finlay House has nine full time employees. In administration there is a Director, Finance Manager, Leasing Agent and Receptionist. Maintenance has a Supervisor, three maintenance technicians and a housekeeper.

There are two types of apartments at Finlay House. One bedroom apartments are the most popular giving the tenant 595 square feet. Included in this space is a living room, a bedroom, a kitchen, a bathroom and a walk in closet. The studio apartments have a living and bedroom combined, a kitchen, a bathroom and two smaller closets. The studio apartments are approximately 495 square feet.



Some of the adaptations our tenants have to make are downsizing, transportation, working with congregate housing and being close to their neighbors. Some of them deal with the transition from homelessness to being in a structured environment.

Some of the favorite activities are visits from interested students. The tenants love to share their life stories with younger generations.

After talking with tenants, one discovers lessons to be learned to live a fuller life. These lessons include keeping active, building hobbies and developing varied interests of life. Another key is to manage their money to give options for both housing requirements and entertainment. It is important to build friendships that last over time and maintain an active social life. It is important to keep physically active. Also, the successful ager will keep an attitude of service and a focus on others.



Alzheimer's Resource Coordination Center (ARCC)

The <u>Alzheimer's Resource Coordination</u>

<u>Center (ARCC)</u>, located within the South Carolina Department on Aging, was established by state legislation in 1994. The Center's goal is to serve as a statewide focal point for coordination, service development, information, and education to assist persons with Alzheimer's disease and related disorders (ADRD) and their families.

The South Carolina Department on Aging, Alzheimer's Resource Coordination Center, is pleased to announce a solicitation for Alzheimer's services program grants for the grant year beginning July 1, 2019. Please click the links below for additional information. Any questions should be directed to Elizabeth Ford, Program Manager.

2019-2020 ARCC Grant Announcement and Information

2019-2020 ARCC Grant Packet (with Timetable)

2019-2020 ARCC Grant Application FAQs (Updated)

About the Issue

The U.S. Census Bureau projects that in 2030, South Carolina will be home to 1.1 million people over the age of 65, potentially propelling South Carolina to a ranking of 15th in the nation for the highest percentage of elderly residents. Increasing age is a leading risk factor for Alzheimer's disease, and South Carolina's rapidly growing older population presents a challenge to families, communities and those who plan and deliver services for the state.

Source: 2017 Annual Report: South Carolina Alzheimer's Disease Registry. USC, Office for the Study of Aging.

Overview

86,000 South Carolinians are living with Alzheimer's. That's 11% of South Carolina's seniors! By 2025, that number is projected to grow to 120,000 South Carolinians with Alzheimer's.

Source: 2017 Alzheimer's Disease Facts and Figures <u>Report</u>

In South Carolina, more than half of all adults providing unpaid care to loved ones with Alzheimer's or another dementia have been doing so for at least two years. More than one-third of Alzheimer's and dementia caregivers provide 20 or more hours of care per week.

Source: 2015 Behavioral Risk Factors Surveillance System – SC Caregiver Module

Alzheimer's Resource Coordination Center (*ARCC*) *Grants*

Each February, the Alzheimer's Resource Coordination Center (ARCC) announces grant funding availability for the upcoming State Fiscal Year (July – June). Applications are accepted for (1) respite care programs or (2) educational programs for families and caregivers of persons with dementia.

Successes

The SC Legislature has designated \$150,000 for seed grants to be distributed by the ARCC each year. Grants awarded through the center assist local communities in developing programs to serve persons with dementia and their caregivers.

Alzheimer's Resource Coordination Center (ARCC) Advisory Council

The ARCC Advisory Council is composed of Lt. Governor appointed members and is comprised of persons from agencies and organizations that have a special interest in Alzheimer's disease and related dementias.

What does the Advisory Council do?

• Initiate the development of systems which coordinate the delivery of programs and services

- Facilitate the coordination and integration of research, program development, planning and quality assurance
- Identify potential users of services and gaps in the service delivery system and expand methods and resources to enhance statewide services
- Serve as a resource for education, research and training and provide information and referral services
- Provide technical assistance for the development of support groups and other local initiatives to serve individuals, families and caregivers
- Recommend public policy concerning Alzheimer's disease and related disorders to state policymakers
- Submit an annual report to the Joint Legislative Committee on Aging and to the General Assembly

Source: <u>https://aging.sc.gov/programs-</u> initiatives/alzheimers-resource-coordination-centerarcc

Legal Assistance for Seniors in South Carolina

Under Title III-B of the Older Americans Act mandates, the South Carolina Department on Aging funds the provision of legal assistance through the various Area Agencies on Aging throughout the state. Legal assistance means legal advice and representation. In South Carolina, that assistance must be provided by an attorney.

Legal Assistance can be provided to older individuals (60 years of age and older) within the state who are of greatest economic or social need (with particular attention to low-income minority older individuals, older individuals with limited English proficiency, and older individuals residing in rural areas).

The South Carolina Department on Aging has long-standing partnerships with the SC Bar and

the SC Bar Pro Bono Program, the Access to Justice Commission, SC Legal Services, and other agencies (governmental or otherwise) who can provide legal advocacy for the target population.

The Department actively seeks to develop partnerships with entities who can provide legal assistance in keeping with the tenets of law and regulation as set forth in the Older Americans Act, the Legal Services Corporation Act, and the regulations promulgated under these laws. If you are a service provider and are interested in providing education or legal services, please call 1-800-868-9095.

Volunteer Attorneys

The <u>SC Bar</u> is instrumental in providing assistance using volunteer attorneys in various areas of the state for education, wills clinics, and "Ask A Lawyer" programs targeted to the senior population or appropriate for caregivers. Please contact them at (803) 799-6653 to find out how you can participate in the effort to ensure that seniors have the legal services they need at no cost.

Areas of Legal Services

Legal Services can be provided in eleven specific categories including:

- Income Protection
- Health Care
- Long Term Care
- Nutrition
- Housing
- Utilities
- Protective Services
- Guardianship/Defense Against Guardianship
- Abuse
- Neglect
- Age Discrimination

The following legal document templates are available via the source link below:

Living Will in English

<u>Health Care Power of Attorney in English</u> <u>Health Care Power of Attorney in Spanish (Oder</u> <u>Legal Para Atencion Medica)</u>

Source: https://aging.sc.gov/programs-initiatives/legal-

assistance-seniors

Pet Programs for Seniors

Why have Pet Programs for Seniors?

Our pets play an important role in our lives, and often they serve as surrogate family members, faithful companions, and even our protectors. That is no different for seniors. Through the Pet Program for Senior Citizens, seniors living on a fixed income are able to receive assistance to care for their pets.

Overview

According to the American Veterinary Medical Association, nearly 46 percent of seniors who are 66 years of age or older, own at least one pet. Pets are an integral component of providing social support for seniors. Research has proven that pets play a vital role in the lives of seniors. Seniors who own pets often have lower cholesterol, blood pressure, and pulse rates; have 21 percent fewer doctor visits than those who do not own pets; make friends easier; are less likely to face depression; and are more active, according to The Pets For The Elderly Foundation.

How does the program work?

There are two pet related programs offered through the South Carolina Department on Aging:

- Paw Pals is a program that offers pet food to qualified seniors at no cost.
- Through Pet Vets for Seniors, our veterinarians offer limited services to approved senior citizens for a reduced cost.

Senior Citizens receiving services through either program will be assessed by SCDOA or AAA staff to qualify. Other requests for pet services are handled on a case-by-case basis. All pet services are identified by SCDOA staff and statewide partners.

Here's how you help:

Donations and partnerships

Donations and partnerships are a key component of the Senior Pet Program as it is the program's only funding source.

Become a Business Partner

Businesses who cater to pets with supplies or services may provide donations to the SCDOA, which in turn, will be given to a senior. Supplies may include, but are not limited to: pet food; crates; pet beds; harnesses or collars; leashes; treats; and pet toys. Services may include, but are not limited to: yearly vaccines; spaying and neutering services; grooming; and emergency pet care.

Become a Business Contributor

Businesses who do not provide pet services are more than welcome to support the Senior Pet Program through contributions.

Support a Senior's Pet

The supporter will be provided with the name of a pet. When a need arises for that pet, you will be contacted to help support him or her.

Donate in Honor or Memory of a Beloved Pet

Source: <u>https://aging.sc.gov/programs-initiatives/pet-programs-seniors</u>

Meeting Notice for the South Carolina Advisory Council on Aging

Public Hearing

Wednesday, April 24, 2019

1:00 - 3:00PM

Room 110 of the Blatt House Office Building

The South Carolina Advisory Council on Aging will meet on Wednesday, April 24, 2019 in room 110 of the Blatt House Office Building 1:00 - 3:00PM. The purpose of the meeting is to solicit public testimony from South Carolina aging stakeholders.

Individuals requesting to speak, must send an email to

gdickinson@aging.sc.gov to RSVP. Each speaker will be allotted up to three minutes to present on an aging topic. Organizations should designate one speaker to address the council. Speakers should provide 17 copies of their testimony to the members of the Advisory Council when called to present.

Additionally, speakers who want their remarks included in the South Carolina Advisory Council on Aging's official report should submit a written copy via email by April 23, 2019 to gdickinson@aging.sc.gov.



Senior Citizen Day 2019

South Carolina State Fairgrounds – Goodman Bldg. 1200 Rosewood Drive Columbia, South Carolina

Wednesday, May 8, 2019 9:30 a.m. to 1:00 p.m.

Music and Entertainment · Vendors · Guest Speakers Health Screenings and Medication Review Available Lunch Served (RSVP required)

Free Event and Parking · Open to the Public

RSVP for lunch by calling the South Carolina Department on Aging at 803-734-9880.

(*Continued from p.1. Sources:

https://www.prb.org/aging-unitedstates-fact-sheet/

https://www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_Housing_Americas_Older_Adults_2018_1 .pdf

https://scaccess.communityos.org/zf/taxonomy/detail/id/468129)



We are excited to present this electronic 2019 issue of the Aging Matters Newsletter. We welcome your suggestions and comments. If you wish to submit aging related items for future issues please email them to Dr. Rita J. Chou at rjchou@sc.edu

Aging Matters, the newsletter of the South Carolina Center for Gerontology, College of Social Work, University of South Carolina, Columbia, SC 29208

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New Subscribers Wanted

If you think someone else may be interested in receiving this electronic newsletter, please ask him or her to email: Dr. Rita J. Chou <u>rjchou@sc.edu</u>, with his/her full name, occupation/position, and name of organization/agency/business. Thank you.