

Newsletter | October 2020



Columbine Health Systems Center for Healthy Aging COLORADO STATE UNIVERSITY

A NOTE FROM THE DIRECTOR

Dear Colleagues and Friends,

Greetings to you from the Columbine Health Systems Center for Healthy Aging! I hope this newsletter finds you enjoying some cool mornings, warm days and beautiful autumn colors.

As you will see from this newsletter, we have a whole list of exciting and informative events for you to explore through upcoming webinars, educational outreach, scientific meetings, and services. I urge you to check out the THRIVE Project, which is seeking to engage older adults in the community and match them with a host of services offered at CSU. Scroll to page 6 for more information or visit our <u>Programs and</u> <u>Services page</u> if you are interested in participating. Also, you'll want to check out the Healthy Aging Blog section for cutting-edge topics of interest to those who seek to understand the current body of knowledge on healthy aging.

One of the Center's new initiatives is to encourage people in their 20's and 30's to think about what they can do now to support longevity and health across their lifespan and into advanced age. Research shows that people in their second and third decades rarely explore these topics, so we've created the first "Aging in Your 20's and 30's Panel" webinar, to be held Oct. 16, to start the conversation. Please distribute this invite to colleagues, family members, and students so we can begin to help young adults understand how they can influence their own aging pathways. We have many other exciting announcements, and I invite you to explore this newsletter for all the details. Wishing you all a beautiful autumn and healthful fall semester! Publications + Grants Healthy Aging Blog Aging News

CHA Events Research Recruitment Faculty + Student Awards

COVID-19 Support Mental Health Resources Events + Happenings

Warmest Regards, Nicole Ehrhart

Publications + Grants



Reactive Oxygen Species Modulate Activity-Dependent AMPA Receptor Transport in *C. elegans*

Researchers Rachel Doser, <u>Gregory Amberg</u> and <u>Frederic Hoerndli</u> of the Dept. of Biomedical Science have a <u>new publication</u> in The *Journal of Neuroscience*. By using live imaging of glutamate transport in intact *C. elegans* animals, Doser *et al.* show that small changes in reactive oxygen species lead to decreased glutamate receptor transport affecting synaptic activity. This study reveals new evidence in support of a link between metabolic demand and regulation of synaptic transmission. It also has implications for aging and neurodegeneration since hyperactivity and increased calcium are thought to be early indicators of neuronal dysfunction and loss.

Functional implications of impaired bimanual force coordination in chronic stroke



A <u>new study</u> from Postdoctoral Fellow Prakruti Patel and Assistant Professor <u>Neha Lodha</u> of the Dept. of Health and Exercise investigates how chronic stroke affects an individual's ability to coordinate forces with both hands in order to manipulate objects. 28 participants (14 stroke survivors and 14 healthy controls) were tasked with assembling a pegboard and completing a dynamic force tracking task with their index fingers. Results showed that individuals with stroke had impaired bimanual dexterity and diminished bimanual force coordination, suggesting that re-training bimanual force coordination in stroke survivors could improve bimanual dexterity for everyday tasks.

Synapse Protection in AD by a Novel Peptide as a Chemokine Antagonist



CSU investigators Jim Bamburg, Tom Kuhn, and Soham Chanda of the Dept. of Biochemistry and Molecular Biology have received <u>NIH grant funding</u> to test how an orally delivered peptide impacts synapse loss in Alzheimer's disease (AD). Functional impairment in AD results from loss of synapses, preceding and independent of neuronal death. Cofilin-actin rods (rods) are an early AD indicator whose formation is linked to a signaling pathway involving chemokine receptors. Rods form in neuronal processes (axons and dendrites) under conditions of energetic and oxidative stress, and if not disassembled, block transport and cause synapse loss. Rods are significantly increased in animal models of AD and in the human AD brain. Conversely, cognitive deficits in mouse models of AD are alleviated by decreasing cofilin activity in neurons or by inhibiting rod formation through blockage of the rod signaling pathway. The team hypothesizes that this peptide, which can penetrate the blood-brain barrier, will inhibit rod concentrations in the brain and thus deliver cognitive benefits in AD and other dementias by preventing synapse loss—to be tested in this proposal.

Inflammaging: The Side Effect of Age You Haven't Heard of

Rachelle Cannon and Olivia Cooper CSU Dept. of Health and Exercise Science

Is Exercise or Glucosamine Better for Arthritis?

Katie Higgins, Meredith Krautler-Klemme, and Kayla Woodward CU-Boulder Dept. of Integrative Physiology

Simple Daily Movement May Improve Brain Health

Tara Grieshaber, B.A. '17 CU-Boulder Dept. of Integrative Physiology

Aging News



<u>Understanding the effect of aging</u> <u>on the genome</u> via *Phys.org*



<u>Ultra-processed foods may</u> <u>accelerate biological aging</u> via *Medical News Today*



<u>Gut microbes could unlock the</u> <u>secret to healthy aging</u> via Science Daily



Doctoral student awarded Dean's Fellowship for chemotherapy research

Aly Cavalier, a doctoral student in the CSU Dept. of Health and Exercise Science, has received a <u>\$20,000 Dean's Fellowship from the CSU College of</u> <u>Health and Human Sciences</u> for her study on the effects of chemotherapy on the brain. "Chemobrain" is a common term used by cancer survivors to describe cognitive impairments that can occur during and after cancer treatment. While "chemobrain" is very common, the cause of it is still unknown. Cavalier is conducting research aimed at better understanding the potential effects of chemotherapy on neurons, with the hope to identify possible treatment approaches for the condition. Aly's advisor, Dr. <u>Tom LaRocca</u>, is a Center Faculty Member here at CHA. Congrats Aly!

Aging in Your 20s and 30s

PANEL DISCUSSION

Join us for a FREE webinar about what you can do now to age healthily in the future.

Friday, October 16 • 12-1 PM MT Zoom registration: col.st/pAe2s

Submit panel questions to healthyaging@colostate.edu!



Aging in Your 20s and 30s Panel

Calling all young adults! The Columbine Health Systems Center for Healthy Aging is hosting a panel discussion about what young people can do now to support healthy aging in the future. Join CSU faculty members Drs. Allyson Brothers, Gloria Luong, Michelle Foster, and Rick Perry as they answer all of your questions about nutrition, exercise, wellness, and mental health.

When: Friday, Oct. 16 at 12 p.m. MT. Register for the webinar at: <u>col.st/pAe2s</u>. Submit your questions for the panel to <u>healthyaging@colostate.edu</u>.

COVID-19 Expert Panel Q&A

Join the Center, Senior Access Points, and CSU Extension for our next webinar in the COVID-19 Expert Panel Series. These informative sessions are open to the public, our community partners, and service providers to answer all of your COVID-19-related questions. Panelists include CSU faculty experts in gerontology, infectious disease, biosafety, mental health, food safety and geriatric medicine.

Watch our last panel <u>here</u>. Register in advance <u>here</u> for the Oct. 12 webinar. E-mail ali.murphy@colostate.edu with any questions you have for our panelists!

COVID-19 Expert Panel Series

Monday, Oct. 12 | 10:30 AM MT

Submit questions for the panel to ali.murphy@colostate.edu.

Free Zoom Webinar

Register at: col.st/d9z1w



ng Reference



HEALTHY AGING SPEAKER SERIES

Featuring: Mindy Rickard

Advance Care Planning

> Thursday, Oct. 22 12 P.M. MT Virtually on Zoom

Register by email to ali.murphy@colostate.edu

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Healthy Aging Speaker Series

Our next talk in the Healthy Aging Speaker Series will feature <u>Mindy Rickard</u>, the project coordinator for the Advance Care Planning Team at the <u>Health District of Northern</u> <u>Larimer County</u>. Rickard will guide us in how to create and share advance directives about our future medical care for our loved ones. When: Thursday, Oct. 22 at noon!

E-mail ali.murphy@colostate.edu to register and receive the meeting password. Catch up on Dr. Neha Lodha's September lecture <u>here</u>.



Dr. Silvia Sara Canetto receives Louis I. Dublin Award



Silvia Sara Canetto, a professor in the Dept. of Psychology at CSU, is the recipient of this year's Louis I. Dublin Award, a national award bestowed by the American Association of Suicidology. The association is the nation's largest professional and academic group in suicide prevention and research. The Dublin award recognizes "lifetime achievement and outstanding contributions to the field of suicide prevention." Dr. Canetto is internationally recognized for bringing transformational, cultural- and gender-script frameworks to suicide theory and research. Her 1998 article "The gender paradox in suicide" is a citation classic (currently third most-cited) in *Suicide and Life-Threatening Behavior*, the leading suicide-research journal. Her current research examines cultural narratives that may explain why in in the United States, older white men have higher suicide rates than any other demographic group. Professor Canetto has been elected "Fellow" of several professional societies including the Gerontological Society of America, the American Psychological Association, and the Association for Psychological Science.

Research Studies Currently Enrolling

AgingPLUS

AgingPLUS is a new research program at CSU aimed at helping adults grow older in healthier ways. Participants will attend four educational classes to explore strategies for successful aging and complete three sets of psychosocial and physical assessments over a 10-month period. To learn about participating in the AgingPLUS study, please contact the ADAPT team at **970-491-5001** or e-mail **adaptresearch@colostate.edu**.

Fit Cancer Exercise Program

The Physical Activity for Treatment and Prevention Lab (PATP) in CSU's Dept. of Health and Exercise Science is enrolling cancer survivors in an exercise program, beginning mid-September. The Fit Cancer Program is a supportive group-based exercise program designed for cancer survivors at any phase of the cancer journey. Visit <u>this link</u>, email **patplab@colostate.edu**, or call **970-491-4653** for more info.

Relocation and Transitional Experiences (RELATE) Study

The Health, Emotion, and Aging Research Team (HEART) is looking for individuals and couples, aged 50+, who are planning to move into any type of senior housing facility to participate in a study. The study includes surveys and assessments related to physical and mental health, which are spread out across 3-4 months. Call **970-491-0871** or email **HEART@colostate.edu** for more info.

Knee Osteoarthritis Study

Researchers from CSU's Department of Health and Exercise Science are recruiting adults to participate in a study that investigates solutions to muscle and joint pain in arthritis. <u>More</u> <u>information can be found here</u>, by e-mailing Karyn Hamilton at tracd@colostate.edu, or calling 970-491-3961.

THRIVE Project: COVID-19 Support Services for Older Adults

The Columbine Health Systems Center for Healthy is now offering virtual and telehealth services to address the needs of older adults affected by COVID-19. After an initial needs/wants interview, participants will be enrolled in an 8-week program that exposes them to key services listed below. At the end of the program, participants will work with a care coordinator to select a customized "menu" of services to continue participating in via video modules and physically-distanced interventions. For more information, call 970-235-0083 or email thriveproject@colostate.edu, or visit this link.

Technology assistance to navigate mainstream video conferencing tools, get support for personal technology devices, and learn about community programs offering free technology and Wi-Fi

Guided social support groups

that address issues related to healthy aging, isolation, mental health, and caregiving. Games (e.g. Bingo) and shared virtual tours (e.g. Monterrey Aquarium) are also provided for social engagement.

 Respite care, performed by CSU students, to provide virtual/phone respite to family caregivers Care coordination, performed by Social Work and Psychology students, to assess needs and wellbeing, teach coping skills, and create future plans of care

 Nutrition counseling, performed by registered dietitian nutritionists, to address eating challenges or provide cooking and food safety tutorials

Music-Connection led by CSU Music Therapy students using your favorite music. Resources can identify how music can be used at home to improve quality of life. Exercise and wellness activities, led by Health and Exercise Science students, including a variety of activities to promote flexibility, balance, toning, core stability, strength, cardiovascular endurance, and more

Animal-related

activities, offered by the Human-Animal Bond in Colorado (HABIC) program, to provide animal-related content in letters, photo stories, videos, and virtual animal therapy visits designed to increase well-being and address feelings of loneliness and isolation

Aging Clinic of the Rockies New Caregiver Mentorship Program



Are you a caregiver for an older adult? Caregiving can be both a rewarding and challenging experience. Fortunately, we know there are things that can help! The Caregiver mentorship program (CMP) will match you with an experienced caregiver mentor. Your mentor can provide peer support to help you develop skills related to stress reduction and self-care, responding to caregiving challenges, and tapping into community resources, among others. Having a caregiver mentor could benefit you and your care recipient!

Services will be provided remotely or in a safe, socially-distanced manner. For more information, contact Ben Lotstein at: (970) 491-6795 or Ben.Lotstein@colostate.edu.

alzheimer's R association[®] VIRTUAL EARLY STAGE PROGRAMS

If you or someone you know has been recently diagnosed with Alzheimer's disease, mild cognitive impairment (MCI), or another type of dementia and is living in the early stages, the Alzheimer's Association of CO is providing virtual programs to help you and your family. Explore <u>this link</u> for more information or look at the attached PDF sent with this newsletter!



Nature Aging, coming January 2021

<u>Nature Aging</u> is a thematic, online-only journal publishing research articles, reviews, news, and opinion pieces from across the broad field of aging research that will be launching in January 2021. Submit your manuscripts in advance <u>here</u>. Visit <u>this link</u> for a curated collection of recent *Nature Research* papers on aging, longevity, and age-related diseases that reflects the diversity of what *Nature Aging* aims to support and feature.

Events + Happenings



Homecoming 5K Oct. 1-3

The 40th Annual Homecoming 5K, hosted by the Dept. of Health and Exercise Science, is being held virtually this year. The deadline to register and submit race times is this Saturday, Oct. 3. Proceeds from the race will benefit the Fitness Therapy for Cancer (FitCancer) Program at CSU. More info <u>here</u>.



Amputation Isn't the Only Option: How CSU Research is Saving Limbs and Lives Tuesday, Oct. 27 5:30–6:30 p.m.

Researchers at CSU have discovered scientific methods for regenerating bone and muscle in limbs that have been severely damaged by trauma, cancer or infection. By employing these cutting edge techniques in canine patients and humans, they have been able to save limbs... and lives. Join to hear CHA's director Nicole Ehrhart discuss this fascinating topic by registering <u>at this link</u>.

CANCER AND AGING MINI-SYMPOSIUM

November 2 and 3 9–11 a.m. via Zoom <u>The University of Colorado Cancer Center (UCCC)</u> is excited to announce <u>"Cancer and Aging", a mini-symposium</u> to promote cuttingedge, collaborative talks from members of all UCCC programs plus regional aging centers, including the CHS Center for Healthy Aging. Topics will range from a very basic understanding of how aging impacts cells—from mutations, to metabolism, to pathways and telomeres immune function, cancer progression, therapeutic responses, clinical outcomes, and patient decision-making and survivorship. There is also an associated <u>RFA for pilot grants</u> for collaborative, multi-disciplinary, impactful projects that engage the community.

