Dear Readers,

It has been a busy spring at the Knoebel Institute for Healthy Aging (KIHA)! We held several events that we share here.

In February, we welcomed Dr. Nicolas Bazan from LSU, who wrote a book about a female jazz singer in New Orleans with Alzheimer’s disease. The book was made into a movie featuring several well-known actors. One night we screened the movie, followed by a Q&A led by Dr. Leah Weinberg, visiting professor of Musicology in the Newman Center at DU. The following day, Dr. Bazan presented his recent work on a new class of lipids that may play a role in neurodegenerative conditions and stroke.

In March, Dr. Harry Drabkin at CU Anschutz and formerly director for clinical services at the Hollings Cancer Institute in Charleston, SC, gave an overview of recent developments in the Cancer field.

KIHA organized its first conference in April, focused on the State of Aging in Colorado. More than 100 specialists from government, nonprofits, and six universities in Colorado discussed the current situation for older adults in our state, and what we can do to make Colorado the best state for aging. The day began with Mr. Wade Buchanan, Senior Advisor to the Governor on Aging. He gave an overview of demographics in Colorado, and also led two panels consisting of government specialists on aging in Colorado. See pp. 3-4 of this issue for photos and more information about the experts who attended and provided valuable information and advice. The conference was organized by the Colorado Coalition for Aging Research and Education (CoCARE), consisting of aging experts from six universities in our state.

Finally, we have given out seven intramural pilot grants to DU investigators. We received many interesting proposals that were reviewed by an expert internal and external panel—read about the investigators and their grants that were awarded grant funding on p.8.

Have a wonderful summer!

Lotta Granholm
Inaugural Executive Director,
Knoebel Institute for Healthy Aging
aging@du.edu
Dr. Nicolas G. Bazan is a neuroscientist and eye researcher, author, educator, mentor, entrepreneur, music enthusiast, and art lover. His research focuses on neurodegenerative diseases, aiming to understand endogenous modulation of neuroinflammatory signaling, with a lifelong quest to help people affected by stroke, Alzheimer’s disease, pain, blindness, and other diseases. He has written two books: The Dark Madonna: A Fable of Resilience and Imagination and Una Vida: A Fable of Music and the Mind, on which this movie is based. On February 21 this year, we screened his movie Of Mind and Music at KIHA.

The movie is about a renowned neuroscientist (Joaquim de Almeida) who tries to find the long-lost son (Marcus Lyle Brown) of a talented singer (Aunjanue Ellis) who has Alzheimer’s disease. The movie is now available on Netflix or streaming online. You will love this story about science and music, about a terrible disease, and the impactful effect of music for those suffering from dementia.

There was hardly a dry eye in the audience during this powerful story that links music and Alzheimer’s disease in a fascinating and engaging story. The event was organized in collaboration with Alzheimer’s Association.

Director: Richie Adams
Music composed by: Carlos José Alvarez
Screenplay: Richie Adams, Dr. Nicolas Bazan
Executive Producer: Dr. Nicolas Bazan
Producers: Richie Adams, Brent Caballero, Nancy Green-Keyes
Cast: Ruth Negga, Aunjanue Ellis, Joaquim de Almeida, Bill Cobbs & Sharon Lawrence
The Coalition for Aging Research and Education (CoCARE) was formed in the fall of 2017 to coordinate efforts in the aging field between the following universities in Colorado:

- DU Knoebel Institute for Healthy Aging
- CSU Center on Aging
- Regis University
- CU Boulder
- CU Colorado Springs Aging Center
- CU Anschutz Center on Aging

The primary purpose is to form a network of university programs focused on aging research and education. Each university in the region can contribute with different pieces of aging needs, and have a new set of collaborators in turn. An immediate benefit will be that people get to know others focused on aging studies or education in Colorado. This will play a role forming collaborative groups, workforce development, for lobbying, legislative issues, and collaboration. The secondary purpose is to examine ongoing projects in our region, to enhance and share resources and increase the research portfolio for aging in Colorado. We think that Colorado is a unique state in which to promote aging studies and education; the population is motivated, education level is high, and the government is interested in change for the better for all populations. Together, universities will have a stronger voice, and can accomplish so much more than isolated programs at each of the Institutions involved. A sure outcome of this coalition is enhanced collaboration and increased research dollars in aging coming to Colorado.
The first mission of CoCARE was to organize a conference in the Spring of 2018. We focused the conference on the state of aging in Colorado, inviting government, nonprofits, and companies as well as staff and faculty from the six universities included in CoCARE. On April 13, 2018, we hosted more than 100 individuals working on aging issues at KIHA’s event space at DU. The first speaker was Mr. Wade Buchanan, Senior Advisor to the Governor on Aging.

Mr. Buchanan provided an overview of state demographics.

Mr. Buchanan then led the discussions of two panels that included staff members from CDOT, Area Agencies on Aging, Division of Aging and Adult Services, Department of Health Care Policy and Financing (HCPF) and several others. Following the government agencies, we heard from the Director for AARP Colorado, Bob Murphy, and the President of the Senior Lobby, Ed Shackelford. In the afternoon, there were panels from community organizations, companies in the aging field, and the CoCARE institutions. The overall consensus of the day was that this is a rare opportunity for Colorado institutions and government to work together to make Colorado the best state for aging.
8:30 Breakfast and registration
9:00 Welcome/Intro of all CoCARE members
9:15 Introduction by Wade Buchanan, Governor’s first Senior Advisor on Aging
9:30 Panel I: Government Agencies.  
Facilitator: Wade Buchanan  
Josh Laipply, CDOT  
Mindy Kemp, Div. of Aging and Adult Services  
Jayla Sanchez-Warren, Area Agencies on Aging for Metro Denver
10:15 Coffee break
10:30 Panel II: Government Agencies.  
Facilitator: Wade Buchanan  
Karen Brown, SAPGA and Aging 2.0  
Alison George, Division of Housing at the CO Department of Local Affairs  
Randy Kuykendall, Health Facilities and Emergency Medical Service Division at the CO Department of Public Health and Environment
11:15 Bob Murphy, AARP Colorado
11:30 Ed Shackelford, CO Senior Lobby
11:45 Lunch
12:45 Panel III: Nonprofits and Colorado-Based Businesses.  
Facilitator: Lise Youngblade, CSU  
Nicole Adante, Innovage  
Pat Cook, Colorado Gerontological Society  
Thelma Craig, Colorado Black Health Collaborative  
Therese Ellery, Rose Community Foundation  
David Geras, GoldLeaf HomeHealth
Amanda Gregg, A Little Help  
Jim Herlihy, Alzheimer’s Association Colorado  
JJ Jordan, Dementia Friendly Denver  
Tami Lack, Colorado Neurological Institute (CNI)  
Phil Nash, Boomers Leading Change  
Tom Wagenlander, Wish of a Lifetime
2:00 Coffee break
2:20 Panel IV: University representatives from each CoCARE University  
Facilitator: JJ Jordan  
Skotti Church, CU Anschutz  
Patsy Cullen, Regis University  
Lotta Granholm-Bentley, KIHA, DU  
Tom LaRocca, CU Boulder  
Sara Qualls, UCCS  
Lise Youngblade, CSU Columbine Health Systems Center for Healthy Aging
3:15 Multiple roundtables  
Facilitators: Maureen McDonald and Doug Krug
4:30 End of day summary  
Roundtable Discussants  
Nicole Adante, Innovage  
Karen Brown, SAPGA, Aging 2.0  
Eric Chess, KIHA, DU  
Alison George, Division of Housing at the Colorado Department of Local Affairs  
David Geras, GoldLeaf HomeHealth  
Amanda Gregg, A Little Help  
JJ Jordan, Dementia Friendly Denver  
Mindy Kemp, Division of Aging and Adult Services  
Ben Moultrie, SAPGA and The Next 50 Initiative  
Phil Nash, Boomers Leading Change  
Monica Roers, Seniors Resource Center  
Leslie Hasche, GSSW, DU
5:00 Wine & Cheese
Get to Know KIHA’s Dr. Daniel Paredes

Dr. Paredes began his career in Maracaibo, Venezuela studying Biology at the University of Zulia. For his undergraduate thesis he worked with Shamans (traditional healers) in villages in the Andes identifying plants with medicinal properties and brought the plants back to the lab to isolate the active compounds. This work led to his interest in the brain and ultimately drew him to pursue a career as a neuroscientist earning his Master’s degree in Biomedical Sciences and a Ph.D. in Pharmacology & Physiology from the Medical School at the University of South Florida (USF). His interest in Aging research was cultivated at USF under the tutelage of Dr. Paula Bickford where they made important discoveries on age-related learning and memory deficits.

Following his Ph.D., Daniel started his postdoctoral training at the National Institutes of Health (NIH) where he worked on a schizophrenia-related gene. Dr. Paredes became an independent Investigator at the Lieber Institute for Brain Development and an Assistant Professor of Neurology at the Johns Hopkins Medical School. In 2016, Dr. Paredes moved to KIHA at DU, where he expects to accomplish his career goal of contributing to solving some of the mysteries related to the aging brain.

Over the years, Dr. Paredes has established himself as an expert in understanding the role of neurotransmitters in movement disorders and psychiatric disorders. Dr. Paredes’ findings have been cited in numerous other scientific papers and led to new advances in schizophrenia and movement disorders care and treatment.

Recently, Dr. Paredes has focused his attention on understanding mechanisms common to several neurodegenerative pathologies. His lab has discovered high levels of polyamines in patients with Parkinson’s disease, Alzheimer’s disease, and Down syndrome-Alzheimer’s disease. There is evidence to suggest that polyamines are involved in protein aggregation, a process underlying several neurodegenerative diseases. He works in close collaboration with other faculty and is on the way to developing a program that combines multiple disciplines to tackle devastating conditions such as Parkinson’s, Alzheimer’s, and Huntington’s disease.

The multidisciplinary approach of Dr. Paredes includes behavioral, in vivo neurochemical and physiological analysis in genetic animal models associated with neurodegenerative disease and analysis of human samples. Dr. Paredes’ ultimate goal is to identify biomarkers for early disease detection and develop new molecular targets for the treatment of neurodegenerative diseases and other age-related disorders.
On May 23, more than 50 guests attended KIHA’s interdisciplinary mini-symposium focused on ALS. Guests received information from the Rocky Mountain ALS Association, the Colorado Neurological Institute (CNI), Augie’s Quest/ALS Therapy Development Institute, and a patient with ALS who invented an iphone app that tracks health data by the patient. CNI’s Executive Director, Tami Lack, announced the start of a new ALS clinical study at the CNI ALS Clinic, and also talked about how much rehabilitation work specialized for ALS patients that CNI undertakes.

The keynote speaker, Dr. Nazem Atassi, MD, MMSc, discussed current clinical trials on ALS. Dr. Atassi is the Associate Director of the Neurological Clinical Research Institute at Massachusetts General Hospital (MGH) in Boston and Associate Professor of Neurology at Harvard Medical School. He completed Neurology training at Boston University Medical Center with a Fellowship in Neuromuscular Disorders and Clinical Trials at MGH. Participants learned about current drugs in clinical trials and the hope of developing a successful intervention. Among novel findings, Dr. Atassi mentioned that his group is working with PET markers for inflammation, which is an early sign for ALS as well as many other neurological diseases. If physicians can discover inflammatory biomarkers in the brain using imaging techniques before any clinical symptoms occur, this might lead to more successful interventions or preventative therapies.

Then Dr. Daniel Linseman shared his recent work on ALS animal models, including a new potential preventative supplement. Dan Linseman, PhD, is a Professor in the Department of Biological Sciences and KIHA at DU. After Dr. Linseman’s talk, participants mingled over wine and cheese and asked questions of the speakers and associations attending. Students also displayed posters and showed recent findings in this field.
Recent Publications


Recently Awarded Grants

1. Dr. Aurelie Ledreux received a two-year grant from the Alzheimer’s Association to correlate Aβ and p-Tau levels from exosomes isolated from blood with exosomes isolated from brain tissues to validate this promising early biomarker method.

2. Drs. Daniel Paredes and Mohammad Mahoor received a two-year PROF grant from DU to improve deep brain stimulation technology.

Congratulations to Our 2018 Pilot Grant Awardees!

1. Robin Tinghitella & Shannon Murphy, Dept. of Biological Sciences, “Effects of maternal and grandmaternal aging on offspring health and longevity.”


4. Scott Barbee, Dept. of Biological Sciences, “Establishing roles for Vps54 in motor neuron axonal transport and neurodegeneration.”

5. Leanne ten Brinke, Dept. of Psychology, “Explaining Older Adults’ Truth Bias: A Consequence of Maturational Dualism.”
