October 2015, Volume 3, Issue 2

Wilsons establish Columbine Health Systems Center for Healthy Aging

BY SHANNON DALE

“Walking through the Columbine Health Systems buildings, it is so good to see all these young people, many of whom are CSU students, in our Columbine uniform helping our senior clients,” says Bob Wilson, owner of Columbine Health Systems. “We want the next generation of caregivers to have even better access to hands-on learning opportunities and innovative research. In turn, this directly supports our seniors who benefit from their expertise.”

To accomplish these goals, Wilson and his wife, Kitty, recently made a $5 million gift to establish the Columbine Health Systems Center for Healthy Aging in the CSU Health and Medical Center slated for the corner of Prospect and College. The

Wilsons have supported CSU for 30 years, investing in students through scholarships, funding the gerontology interdisciplinary minor in the College of Health and Human Sciences, and providing experiential learning through internships. However, the Wilsons did not always have the ability to give so generously to the field of gerontology. Bob Wilson began his career as a Columbine East Nursing Home maintenance worker in 1970 – a position that instilled in him the value of hard work, dedication, and the feeling of building something for oneself. Kitty also embodies these values, going to night school for 17 years while running Columbine Care Center East and then later the Centre Avenue location of Columbine Health Systems. Only six months after Bob Wilson began his maintenance job, he was named administrator of Columbine East. By 1971, he stepped in to lease, then purchase, Columbine after its previous owners filed for bankruptcy. He credits a longtime employee with helping him build the company: CPO Barry Fancher, who has been with him 37 years. Wilson’s passion for providing quality care for seniors led him to establish a relationship with CSU in the hopes of supporting the development of the next generation of gerontology professionals.

Wilsons continued on page 2.

Adult Fitness Program open to the community

BY GRETCHEN GERDING

Do you want to exercise regularly, get fit, or lose weight in a supportive environment? The Adult Fitness Program has an enthusiastic group of students and staff from the Department of Health and Exercise Science who work with community members to help them meet their goals.

The program provides a safe and affordable membership with an affordable monthly fee which includes a weight room, pool, running track, exercise equipment, lockers, and fitness classes such as yoga and Zumba. But the program is much more than just a gym. CSU students staff each session as part of a class for their major, taking blood pressure, doing fitness assessments, working as trainers with the members, and leading warmups and fitness classes. Interacting with participants provides real-world experience as they prepare for employment as wellness professionals, personal trainers and cardiac rehab.

Adult Fitness is located at the Glenn Morris Fitness Center on the CSU campus. For more information on becoming a member, hours and location, see hes.csu.colostate.edu/outreach/adultfitness.

Adult Fitness professionals, among others, Terri Pecora, a member since 2010, works as an IT supervisor for the CSU Registrar’s Office. “The program has really helped me find my motivation,” said Pecora, who works out three mornings per week. “Knowing that a student is there to meet me keeps me coming and doesn’t allow me to make excuses for not exercising.” Pecora has lost about 50 pounds over the years and has seen her cholesterol levels drop. She even completed a sprint distance triathlon.

This semester, Pecora is training with Brandon Malone, a senior in health and exercise science. “This experience has challenged me to take what I’ve done in the classroom and put that information into practice,” said Malone. “It is great to work with a variety of people, at different ages and fitness levels.”

Malone plans a career as a fitness trainer, possibly working with breast cancer survivors.

What I like about the program is meeting someone like Terri, hearing her stories and learning her goals and having her goals turn into my goals because I don’t want to let her down. Learning about the lifelong process of fitness shows me changes I can make for myself and others,” said Malone.

“It’s a very positive program, and for the cost you can’t get this experience anywhere else. It’s priceless because of the attention and care you get from the students, staff and fellow members. It’s a non-intimidating, non-judgmental environment that feels like family. When I participated in a triathlon, five fellow members came to watch and support me. I don’t think I would find that at any other gym,” said Pecora.

University to focus on aging research

BY NK OLSEN

Collaboration and innovation are at the root of finding new ways to address complex challenges, and CSU aims to advance its interdisciplinary research with the help of the cornerstone part of the university’s foundation: its faculty. In 2014, the offices of the Provost and Vice President for Research requested proposals for a faculty cluster hiring – a targeted group of new hires to help boost strategic initiatives. More than two dozen highly qualified proposals were submitted. With consultation from CSU’s Council of Deans, three were selected to split $1 million in base funding, one of which was a cluster hired in aging research.

“We are strategic in our investments when it comes to developing the bricks and mortar of campus, and we should be no less strategic when it comes to growing our faculty and discovery capabilities,” said Provost Rick Miranda.

When CSU and other institutions like the new Health and Medical Center, it will be the intent to offer a full range of medical services to all the region’s senior citizens, and the greater community. When the facility opens in spring of 2017, it already will have innovative collaborations to fill its halls.

New physical spaces such as the medical center provide new opportunities, but without strong programs and at interdisciplinatory innovation, the innovative new facility can fall short of its full potential. The Columbine Health Systems Center for Healthy Aging, established through a $5 million gift from Bob and Kitty Wilson, will be housed in the medical center. Funding for the cluster hire in aging research, with anticipated matching funds from the college, will support the hiring of a director for the emerging center, as well as up to six new positions in various disciplines at CSU.

“Understanding that people in general are living longer and longer is good news, but that also creates a need for addressing critical issues related to aging research,” Miranda said.

State of the sports industry, panel discuss aging research

BY RICK ROYCE

As the world looks at an aging population, shepherding the next generation of aging researchers is an important role for Colorado State University.

On Tuesday, October 20, CSU hosted its first-ever state-of-the-industry event in the Lory Student Center.

The event, “The State of the Sports Industry,” brought together more than 300 attendees, including high school and university coaches, administrators, student-athletes and various industry leaders.

The event featured a keynote address from Assistant Vice President and Director of Athletics, Mike Stanziola, who highlighted the importance of diversity and inclusivity in the sports world.

In addition to the keynote speech, the event featured panel discussions on a variety of topics, including aging research.

Panelists includedCSU’s Associate Vice President for Administration, Pam Putnam-Adams, CSU’s Director of Athletics, Jack Graham, and the Colorado State University Athletics Foundation’s Director of Development, Scott Cummins.

The panelists discussed the importance of aging research in the sports industry and how it can benefit both athletes and coaches.

“Staying on top of aging research is crucial for the success of our athletes,” said Putnam-Adams. “We must continue to learn and adapt to the latest research in order to ensure our athletes are performing at their best.”

The panelists also discussed the role of universities in aging research and how they can contribute to the field.

“We have a responsibility to the community to conduct research that can benefit both athletes and the public,” said Graham. “Our university is committed to investing in aging research and collaborating with other institutions to advance this critical field.”

The event wrapped up with a roundtable discussion where panelists addressed questions from the audience.

The State of the Sports Industry event was a successful event that brought together leaders in the sports industry to discuss aging research and its importance.

For more information on CSU’s aging research initiatives, please visit chhs.colostate.edu/outreach/adultfitness.
New faculty in School of Education studying equity and diversity

BY ERMICE MIME

Four new faculty members who joined CSU’s School of Education this year continue the institution’s cluster hire approach to contribute to diversity, equity and inclusion through their research, teaching and outreach.

“The primary benefit of such an approach is to raise the stature of research and teaching in many different sub-disciplines of education,” said Daniel McCubbin, assistant professor in STEM education and new cluster hire. “By also cultivating a shared commitment to having diversity, equity and inclusion be a part of everything we do in the School of Education,” said George Kamberlis, director of the school.

The four new hires include Jessica Gonzalez, Vincent Basile, Susana Muñoz and Jessica Wrage-Barrington.

Jessica Gonzalez received her Ph.D. from the University of Central Florida in 2015, and is excited to join the faculty at CSU. Her research areas include: cultural competencies in practicing counselors and supervisors, cultural competencies and client outcomes, psychological distress in minority populations and the treatment of medical illnesses in minority populations.

Susana Muñoz

Susana Muñoz, who received her Ph.D. from Iowa State University, returns to CSU having graduated with her master’s degree in the School of Education’s Student Affairs in Higher Education program. Her main focus has been working in low-income public schools in Brighton and the north Denver area.

Daniel McCubbin

Daniel McCubbin, who received his Ph.D. from Michigan State University, joined the CSU faculty after working as an assistant professor of science education at Loyola University in Chicago. Applying the principles of student-centered learning and implementation, including STEM education, criminalizing mathematics, critical race theory and hip-hop theory, Basile contributes in important ways to the school’s focus on inclusive teaching and diversity.

Vincent Basile

Vincent Basile received his Ph.D. from the University of Colorado, Boulder. His interests focus on school-based policy, including STEM education, criminalizing mathematics, critical race theory and hip-hop theory. Basile contributes in important ways to the school’s focus on inclusive teaching and diversity.

New brewery aims to ‘maximize learning environment’

BY TONY PHFER

The upcoming microbrewery in the newly renovated Lory Student Center at Colorado State University intends to maximize student learning by functioning as a “production setting,” to give students in the university’s mead and beer production program the opportunity for experiential learning in the classroom.

The new brewer, craft ales and lagers with high quality in the mid-1800s, no one knew that bacteria pre-digest ingredients — yeast being the most famous of these — had been regularly cited in recent years for promoting overall gut health by adding good bacteria to the digestive system. The benefits of that, evidence suggests, could include anything from better absorption of vitamins and minerals to reduced inflammation and even improvements of symptoms related to auto immune disease.

Since the understanding of fermentation as a biological process is relatively new, food and beverage producers are continually learning more about how to actually control the process to get the results they want.

CSU is making great strides to position itself in this food and beverage industry with its new Fermentation Science and Technology Major. As part of the program, CSU can connect to partnerships that can provide added value for students.

Molson Coors, for instance, is actively involved in supporting the program via the partnership with the college’s Department of Plant and Environmental Technology, Jeff Callaway, director of industry outreach, fermentation and biotechnology, said the new Fermentation Science and Technology program will provide an environment in which cross-disciplinary research can take place and innovative ideas can more easily flourish,

BREWING THE MAXIMUM LEARNING ENVIRONMENT

To ensure the microbrewery represents CSU in the best possible way, there will be a beautiful brewing system in place, along with other equipment that is state-of-the-art.

The new microbrewery will celebrate the history of CSU and its early connection to the food and beverage industry by serving student-crafted beers next to contemporary beers brewed by CSU’s students. The microbrewery will provide an opportunity for socialization by being located in the student union.

For more information please contact Jeff Callaway, director of industry outreach, fermentation and biotechnology, jeff.callaway@colostate.edu, www.fermentation.colostate.edu.

Susana Muñoz

Susana Muñoz received her Ph.D. in public health from Iowa State University, with a focus on health systems development and family studies with an emphasis in aging research. Wilson noted that the fermentation course of study has many applications in the real world.

“Not everyone that graduates will be the brewmaster, there are only so many of those roles, but there are many other roles to be filled: purchasing materials, figuring out how to package products, and more. I myself have worked in the areas of research and development, quality assurance, logistics, and even new business development all over the world.”

Jeffrey Callaway, director for the Colorado State University Fermentation Science and Technology program, said the new brewery aims to “maximize student learning by functioning as a production setting,” to give students in the university’s mead and beer production program the opportunity for experiential learning in the classroom.

“I believe the efforts of our School of Education and the College of Health and Human Sciences to forge partnerships that can provide added value for students will result in the CSU brewery benefiting students.”

The Fermentation Science and Technology program at Colorado State University is intended to maximize student learning by functioning as a production setting, providing input into the development of the internship program, and through guest lectures. In addition, Jeannie Rice, vice president of global technical governance and innovation for Molson Coors, sits on the program’s advisory board.

“We are excited to see our research and innovative new ways to care for our aging community that will come out of this collaborative, community-focused center,” Wilson said.

In honor of his professional accomplishments, leadership in the community, and significant contributions to CSU, Wilson was the recipient of the 2015 Charles A. Lory Public Service Award from the CSU Alumni Association.

Aging research continued from page 1.

Challenges related to age-related diseases and disabilities. Even more important, it challenges us as a society to promote successful, healthy aging so people can live the healthiest and most productive lives possible. Ongoing research at CSU is catalyzing partnerships that can provide added value for students.

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BY EMILY RICE

The upcoming microbrewery in the newly renovated Lory Student Center at Colorado State University intends to maximize student learning by functioning as a “production setting,” to give students in the university’s mead and beer production program the opportunity for experiential learning in the classroom.

“In particular, fermented products that are used in the medicine industry have been regularly cited in recent years for promoting overall gut health by adding good bacteria to the digestive system,” said Wilson. “The benefits of that, evidence suggests, could include anything from better absorption of vitamins and minerals to reduced inflammation and even improvements of symptoms related to autoimmune disease.”

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Kim Jordan and New Belgium Brewing

BY TONY PHIFER

With support from Fort Collins’ three major brewers, Colorado State University’s Fermentation Science and Technology program is growing even faster than anticipated.

New Belgium is the latest to provide support for the fermentation science program. Kim Jordan, who joined the school in 2013, is working to create a program that is relevant, she said.

“We have engaged the university and the industry and the public to help us develop the program, and the public is interested in this as well,” Jordan said. “We’re going to be allocating over 5 years through New Belgium a gift of $500,000, which goes directly to the fermentation science program.”

The gift includes $500,000 from New Belgium and $500,000 from the Anheuser-Busch Foundation.

“New Belgium Brewing and the entire local brewing community are fortunate to have a world-class educational institution here in Colorado State University in Fort Collins,” Jordan said. “When I was in school, there was no such thing as a fermentation sciences program. Our industry and the university have both come a long way in a relatively short time, and we're excited to help support the next generation of brewers who will create and innovate well into the future.”

Anheuser-Busch Foundation

BY TONY PHIFER

The Anheuser-Busch Foundation donated $250,000 to CSU’s Fermentation Science and Technology program last year to fund the renovation of academic space and hands-on lab at CSU.

“Anheuser-Busch and Colorado State University share a commitment to the Fort Collins community, education and brewing quality,” said Fort Collins brewery general manager Kevin Fahrenkrog. “We work hard to bring the beers the lovers they love and to move forward to help educate the next generation of brewers.”

Brewing executives from Anheuser-Busch have already embraced opportunities to meet with students in the classroom and to discuss the growing field of fermentation science, and they view the partnership as a way to continue fostering connections with the local Fort Collins community.

The renovated space will be named the New Belgium Science and Technology Laboratory and will house analytical, brewing, kitchen, and sensory room space.

Jeff Callaway, director of industry outreach for the program, said such gifts not only provide needed support for equipment and facilities, they show industry’s commitment to the success of the program.

“This program is intended to be a resource for the entire brewing industry, and the fact that we have gifts from numerous sources shows that we are engaging industry and working to create a program that is relevant,” Callaway said. “When a student graduates from this program they will absolutely be prepared for a career in the industry.”

Kim Jordan

Olell Brewing Co.

BY ED SEALOVER

CM Cares touches two more families in need

BY JEFF DOODGE

CM Cares, the CSU construction management program’s community service-learning initiative, helped two more families this year.

CM Cares has completed 18 projects throughout northern Colorado over the course of five years with the support of more than 100 volunteers.

One project benefited the Rincons, an Eaton family whose son, Maximino, was the beneficiary of a new bathroom space from CSU’s Social Work program last year. This 2-year-old boy has cyclin-dependent kinase-5, or CDK5, disorder, a rare X-linked genetic disorder that has confined him to a wheelchair and causes daily seizures and neurodevelopmental impairments. A new bathroom with a wheelchair-accessible shower made it easier for his mother to take care of his needs.

Anthony Soido of Boggen was another beneficiary of CM Cares last year. Sodic has Duchenne muscular dystrophy and also relies on his mother for daily care, so the new wheel-in shower and wider bathroom access that the CSU students provided were necessary improvements.

“I not only got a big walk-in bathroom, but also I feel like I made friends with college guys, grappled the 13-year-old Sodic, “I’m pretty lucky. I’m telling everyone about my experience with CM Cares. That is a good name, too, because they do care.”

“This allows you to be part of something bigger than yourself,” said Dawn Thornton, one of the student leaders of the Sodic project. “It is definitely a life-changing experience, and I appreciate it,” added Dan Proud, another student leader of the project.

“Facility cannot do it alone, industry cannot do it alone, and CM students Robert Keenan and Dan Proud. Front row: Nikki and Anthony Pagliassotti, head of the Department of Food Science and Human Nutrition; Kevin Fahrenkrog, general manager of Anheuser-Busch; Jeff Callaway, director of industry outreach for the CM Cares program; and CM students Robert Keenan and Dan Proud. Front row: Nikki and Anthony Pagliassotti, head of the Department of Food Science and Human Nutrition; Kevin Fahrenkrog, general manager of Anheuser-Busch; Jeff Callaway, director of industry outreach for the CM Cares program; and CM students Robert Keenan and Dan Proud.

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Unlocked: Developing communication technology for people with disabilities

BY KRYSTY ROLSTON

For people with amyotrophic lateral sclerosis (ALS), cerebral palsy or a severe upper spinal cord injury, communicating with the outside world can be nearly impossible. "We want to develop a locked-in syndrome, a condition in which they lose all ability to communicate directly and try any hand or arm movement they might have to help them communicate — even blinking their eyes in response to computer sounds," said Patricia Davies, a professor of occupational-therapy who co-directs CSU's Brainwavz Laboratory in the College of Health and Human Sciences and specializes in researching severe impairments. "They can't control any of their muscles and they lose the ability to communicate." The research team is headed by a Naffteocherqi Foundation grant. Davies is partnering with Chuck Anderson in Computer Science in the College of Natural Science. "They are held in Human Development and Family Studies, and Marla Roll in the Assistive Tech- nology and Rehabilitation Research Laboratory, to help those with locked-in syndrome or other limitations in communicating with the outside world.

The research team is developing a brain-computer interface that would allow them to activate an electronic device or dictate a message on a computer by changing their brain signals so they can be interpreted by a computer or sensor as a specific action in real time.

"We really envision building a system that would enable people to turn on a television by doing something simple like multiplying 2 times 4 in their head or type an email by completing a series of mental tasks," Anderson said.

A brain-computer interface, or a pathway through the nervous system, is created by placing electrodes around the scalp to detect the electrical signals produced by neurons firing in the brain. Those signals are then transmitted via a device and then decoded and transmitted into a letter, word or action with the help of a mathematical algorithm. During the first phase of the project, the team tested various EEG systems in homes of Turtle Creek and Pitkin people who struggled to communicate with caregivers. The Na- tional Science Foundation-funded project has reached its second phase. Anderson and his graduate students are building algorithms that sift through "noise" in the EEG data and quickly classify the different brain signals so they can be interpreted by a computer or sensor as a specific action in real time.

Andersson's goal is to build artificial intelligence algorithms that could be used to adapt to a specific person's brain signals and learn from their thoughts. He eventually would like to install a chip in the caregiver that could be designed to detect its patient's water or help with daily tasks.

Once the algorithms are complete, the team plans to return to the patients' homes they visited during the initial field study and try out the system.

"We want to test it and see how well it works," Davies said.

Seams fitting: Avenir Museum honors longtime supporters with opening exhibitions

BY GRETCHEN GERDING

Honoring the past with an eye to the future is the theme as the CSU Avenir Mu- seum of Design and Merchandising opens its new gallery space in the hallway gallery space, features exquisite miniatures, which are a part of the Avenir Museum's permanent collection.

"All of the inaugural exhibitions in the new Avenir galleries have seams connecting them, even though they are so different from one another," said Doreen Beard, director of the Avenir Museum and an Associate Professor of Fashion Design.

"It's a very difficult syndrome and can be caused by all manner of injuries, neuro- muscular diseases and even stroke, " said Patricia Davies, a professor of occupation- al therapy who co-directs CSU's Brainwavz Laboratory in the College of Health and Human Sciences and specializes in researching severe impairments. "They can't control any of their muscles and they lose the ability to communicate."

The Avenir Museum features traditional Guatemalan textiles

Avenir Gallery located in Room 115 of the Avenir Museum of Design and Merchandising grant, Davies is partnering with Chuck Anderson in Computer Science in the College of Natural Science. "They are held in Human Development and Family Studies, and Marla Roll in the Assistive Tech- nology and Rehabilitation Research Laboratory, to help those with locked-in syndrome or other limitations in communicating with the outside world.

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For more information about the Mas- ter of Social Work offered through CSU Online visit www.inthesw.colostate.edu/ degrees/social-work. For more informa- tion on full and part-time on-campus degree options, see www.inthesw.nhs.colo- state.edu.

Online MSW ranked in top 10 programs

BY TIANA NELSON

The School of Social Work online Master of Social Work program was recently named a top 10 program by BestColleges.com.

"We are honored to be ranked as one of the top 10 online master's programs in the U.S.," said Audrey Shillington, director of the CSU School of Social Work. "We are dedicated to breaking boundaries to bring the best of online and face-to-face in an innovative format."

The online Master of Social Work is of- fered through CSU Online. The program began in 1998 and is a part-time degree pro- gram designed for working professionals. Students from across the country participate in the hybrid program, which is primarily online with some face-to-face classroom work in Colorado Springs and Denver to as- sure that students have contact with faculty. Students in CSU's online MSW learn the same high-quality, research-based curriculum as the on-campus program but have the flexibility to go through the majority of the degree in their own com- munities," said Karima Bounini, director of program development and adminis- tration for CSU Online. "CSU Online is proud to support the University's land- grant mission of expanding access to edu- cation and have its program recognized."

BestColleges.com evaluated programs by acceptance, retention, graduation and enrollment rates. CSU's distance Master of Social Work was identified as No. 9 in the country and is the only Colorado pro- gram to be ranked.

The CSU program focuses on practice and policy work in the context of the larger community, where students are taught and mentored by faculty who are experts in their fields. Students utilize their training by working in community organizations and have the opportunity to learn in real-world settings.

The projections of the job market for social work during the next decade put it at one of the highest growing professions, according to the Bureau of Labor Statistics, with employment of healthcare social workers projected to grow 27 percent by 2022. Social workers are employed in a variety of settings, including mental health clinics, schools, child welfare and child service agencies, hospitals and private practices.