Team Pioneer gravitates toward NASA opportunity

It’s a persistent problem for NASA scientists: how to counteract the effects of long-term exposure to zero-, or microgravity, for astronauts and other living things? Traveling and living in space bring with it health risks. NASA investigators have worked for years on this complex issue and, just this summer, five Community College of Aurora students had the opportunity to directly contribute to this important body of research.

Following a NASA call for proposals on the topic, Dr. Victor Andersen, CCA faculty member in astronomy and physics—as well as the college’s affiliate director for the Colorado Space Grant Consortium—alerted students he knew would be interested. Cary Caruthers, Ian Jones, Jaime Corchado, Shellene Suemori, and Will O’Donnell came together as Team Pioneer and submitted a proposal to conduct an intriguing experiment that might help astronauts more safely re-enter Earth’s gravitational field. They soon received word: they had earned a once-in-a-lifetime opportunity to fly, along with their project, high above the Texas plains.

Transformation! Lowry Expansion Phase One ribbon cutting is Sept. 16

A ribbon cutting in recognition of the completion of the Lowry Expansion Initiative Phase One will be held at 11:30 a.m. this Friday, Sept. 16, for Community College of Aurora Foundation board members, college students, faculty, staff, donors, and other invited guests.

The event will showcase the dynamic new environment that has been created over the summer for students at the Lowry Campus.

Speakers will include Dr. Lauren Johnson, CCA alumnus; Ret. Major Gen. Dale Tabor, manager of major gifts at Mile High United Way; Dr. Nancy McCallin, President, Colorado Community College System; Ed Tauer, mayor of Aurora; Tom Markham, Executive Director, Lowry Redevelopment Authority; Dr. Linda Bowman, CCA President; and Bradley Pierce, President, CCA Foundation.

The project, the first of its kind at Lowry, has formed an inviting atmosphere and its completion allows for the provision of essential services for students previously available only the CentreTech Campus. A remarkable new entryway and plaza have been created, and the college encourages members of the community to come out and see the transformation.

The ribbon cutting will take place at the West Quad building, 710 Alton Way, Denver, CO 80230. Building tours will be available.

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Colorado Film School named one of “25 Best Film Schools”

The Hollywood Reporter, a magazine that bills itself as “the definitive interpretive voice of the entertainment industry,” has named the Colorado Film School at CCA one of the Top 25 Film Schools in the world.

The Colorado Film School is on the list alongside prestigious institutions such as the American Film Institute, University of Southern California, UCLA, Syracuse University, Columbia University, Stanford, and the Beijing Film Academy.

“Given that the list is international in scope and includes universities offering primarily academic programs as well as production programs like ours, we are pleased to be included,” said Frederic Lahey, founder and executive director of the School. He added that to further enhance the school’s coursework, as well as the student experience, writing and script analysis classes will feature an increased emphasis on structure, character development, conflict, and personal experience.

Lahey noted that most of the schools on the list cost more to attend for one year than it costs to earn a four-year bachelor of fine arts degree from the Colorado Film School’s collaborative Community College of Aurora and Regis University tracks.

In compiling the list, The Hollywood Reporter consulted industry insiders, executives, filmmakers, and film school graduates. The magazine asked participants to rate each program based on the categories of alumni, cost, facilities, industry access, and strength of faculty. According to its web site, The Hollywood Reporter “is read by the most powerful people in the entertainment industry and the most influential consumers who follow it.” Affiliated with Billboard, Back Stage, and AdWeek magazines, the publication is headquartered in Los Angeles, Calif.

“Excellence in professional film education doesn’t have to be expensive or exclusive,” Lahey added. “It just has to be focused and smart.”

BNSF Foundation supports ESL education at CCA

The BNSF Foundation has awarded a grant of $3,000 to the CCA Foundation to support the Community English as a Second Language (ESL) program at CCA. The college’s highly respected Community ESL program serves nearly 1,800 adult community members each year. Brad Pierce, president of the CCAF board of directors, accepted the gift on behalf of the college and foundation from Trey Davila, director of administration, BNSF Colorado division.

The gift will support the purchase and availability of in-class textbooks for immigrants and refugees in the Community ESL program. The program teaches English to adults through a curriculum that is designed to help students learn the language skills they need for work and day-to-day life in the United States. The classes cover speaking, listening, reading, writing, vocabulary, and grammar. Classwork includes practice with real-life experiences such as filling out forms, reading labels, and finding jobs.

From left: Stephanie Lawton, program coordinator/lead teacher, CCA Community ESL, Aurora Language Center; Chris Ward, CCA executive director, grants and planning; Diana Brady-Herndon, assistant coordinator, CCA ESL program, Aurora Language Center; Brad Pierce, board president, CCA Foundation; Trey Davila, director of administration, BNSF Colorado Division; Cody Parker, trainmaster, BNSF Denver; and Dan Clark, terminal superintendent, BNSF Denver.
on an aircraft affectionately known as the Vomit Comet. The June flight would originate from the world-renowned Johnson Space Center in Houston.

Team Pioneer’s experiment took into consideration what happens when a body is exposed to microgravity. “Typically, on Earth, gravity aids our body in delivering blood to the legs and extremities,” they wrote. “However, in microgravity, the blood pools in the trunk and head. The body responds to this increase in blood to these areas by decreasing the volume of blood in the body overall. The outcome? Unconsciousness upon re-entry as blood rushes to the legs in response to the gravitational pull, and atrophied muscles in the legs due to non-use in microgravity. These muscles ordinarily would assist in constricting vessels that return blood to the head and trunk, decreasing the likelihood of unconsciousness.

The students sought to replicate gravitational forces in space to alleviate these effects. They crafted a two-section box to represent the head, torso, and arms (upper section) and the legs (lower section). During flight, the upper portion was to remain at cabin pressure and experience the full effects of microgravity. The lower portion was sealed, and air pumped out to create a pressure differential, theoretically reproducing the effects of gravity on earth. These muscles ordinarily would assist in constricting vessels that return blood to the head and trunk, decreasing the likelihood of unconsciousness.

The students hypothesized that instead of gravity, they could produce a slight negative pressure on the legs (or simulated legs) they would be able to ‘pull’ some blood back into the legs, they wrote. “We believe that creating negative pressure on the legs will simulate this specific attribute of gravity and decrease, if not solve, the problem of the pooling of blood in the trunk of the human body, reducing the health risks to astronauts.”

Once the team arrived in Houston, their experiment underwent a final review by NASA engineers. They then prepared for takeoff. The team joined students from community colleges around the country in a series of parabolic flights on NASA’s KC-135 aircraft, and they carefully controlled and monitored their experiment to gauge results.

The team's conclusion: “Research... (shows) that the use of negative pressure simulates the gravitational conditions on Earth,” they wrote. “As we continue to inhabit space for longer periods of time on the International Space Station, and as interplanetary travel is becoming more plausible, we must be responsible with the health of those willing to take such journeys.”

Another aspect to the team’s work: outreach activities with students at Vanguard Classical School in Aurora. The CCA students interacted with Vanguard students throughout the project, inviting the grade 3-8 students to participate in a poster presentation. The winner’s project prototype was flown on the KC-135. The students also had access to Team Pioneer through the Internet during the project.

Emergency Response Plan

The CCA Emergency Steering Committee reports that the college’s Emergency Response Plan is in the final written stage. Great strides in emergency training has prepared CCA in the event of an emergency. The Steering Committee has indentified roles for the Incident Command Support Team and selected CCA employees to fill those roles. Emergency response table top exercises will begin September 23 as part of Operation Mountain Guardian and continued training will follow. Building wardens have been selected for every building on the Lowry and CentreTech campuses. They have been equipped with vests, an upgraded radio system, and emergency kits. Plans to install a loudspeaker system on both campuses are under way. Future plans include backup generators and emergency cooling systems for rooms that house CCA servers. Laptop computers are being issued to the Incident Command Team to equip them for a potential emergency situation. Fire drills have occurred on both campuses to prepare faculty and staff and more will be held during class time to involve students in the evacuation training. The Emergency Steering Committee encourages all to become familiar with CCA Emergency Procedures posted in every suite/room. Please become familiar with these procedures and the building evacuation plans posted throughout each building.
A moustache contest? Only at CCA!

Faculty and staff at CCA found a unique way to alleviate pre-semester stress: hey, gang, let’s hold a Moustache Competition! With hosts Wayne Gilbert and Geoff Hunt at the helm, a downright hilarious event was held to judge the marvelous moustachio’d features of five CCA faculty members who grew ‘staches over the summer. The event was replete with song, campy auditions, and PowerPoint presentations on the history and finer points of facial hair.

Winners were: Overall/Best in Show: Patrick Schooler; Most Authentic – Chris Tombari; Mr. Congeniality – Tim Wilkerson; Most Unforgettable – James Gray; and Best Dressed – Clinton Andersen.

To see images of the event, visit http://www.facebook.com/photo.php?fbid=10150761321010125&set=a.483508120124.385421.464548740&124&type=1&theater

DIA benefits from CCA expertise

Pony Anderson, simulation coordinator, Center for Simulation, and Patrick Schooler, department chair for EMS, recently had the opportunity to offer their expertise to Denver International Airport as the site prepared for a major, full-scale emergency exercise. According to Anderson, the college provided 38 CPR/first aid manikins as well as expertise in moulage (the application of makeup to simulate wounds). Anderson had previously assisted DIA with its Master Scenario Events exercise design and the ultimate production of this training, which was required by the Federal Aviation Administration.

Anderson photographed the event, and some of her images are shared here with InterCom readers.
9/11 remembrance ceremonies held

Solemn remembrance ceremonies honoring the victims of 9/11 were held on the Lowry and CentreTech campuses on Sept. 9. At CentreTech, the ROTC Color Guard, CO-021 Rolling Thunder from Aurora Central High School, posted the colors and then lowered the flag to half staff in remembrance. Rolling Thunder participants were Cadet Second Lieutenant Julia Nguyen; Cadet Chief Master Sergeant Elijah Cordova; Cadet Chief Master Sergeant Travis Buxton; and Cadet Senior Airman Ahmawn Romby. At Lowry, CCA students/military veterans Karl Mohr, John May, William Vier, Getahun Mhiretie, and Will Graham led the remembrance ceremony on the large central quad for gathered faculty and staff.

Tom Dury retirement party held

Best wishes to Tom Dury, academic and veterans advisor, in his well-deserved retirement! Tom was feted for his years of dedicated service to CCA and its students at an Aug. 31 event in the Rotunda.

Lowry construction on target

See how the Lowry Expansion Initiative Phase One has progressed over the summer! These changes are the first in a series of upgrades to be made as part of the Lowry Campus Strategic Development Plan. For images documenting the transformation, visit http://www.facebook.com/media/set/?set=a.10150606357940125.677427.464548740124.
Kudos to...

Dr. Geoff Hunt, who has been appointed as the State Faculty Advisory Council (SFAC) representative for CCA. “I am confident that Geoff will be an excellent representative for our faculty and college,” said Interim Vice President of Instruction Carla Malmquist in her announcement to the college community. Hunt is a faculty member in history and is Chair of Social Sciences. He has been employed at CCA since 1995. While serving as interim dean of humanities, fine arts, and social sciences (2001-04), Hunt served for two years as CCA’s representative to the Educational Services Council, the statewide body of Vice Presidents of Instruction. “This experience provided me with an understanding of (the Colorado Community College) System responsibilities, and I believe my background will serve me, and our college, well in fulfilling this role,” Hunt said. He also credits his experience as a faculty member and as interim dean with deepening his understanding of faculty needs and concerns.

CCA named a “Military Friendly School” by G.I. Jobs

G.I. Jobs, the premier magazine for military personnel transitioning into civilian life, has awarded CCA the designation of Military Friendly School. The 2012 Military Friendly Schools list honors the top 20 percent of colleges, universities, and trade schools doing the most to embrace America’s military service members and veterans as students.

In its effort to help student veterans find the right school, G.I. Jobs incorporated a survey of student veterans for the first time. This feedback provides prospective military students with insight into the student veteran experience at a particular institution based on peer reviews from current students. The 1,518 schools on this year’s list make the grade by offering scholarships and discounts, veterans’ clubs, full-time staff, military credit, and other services to those who served. The 2012 list of Military Friendly Schools was compiled through extensive research and a data-driven survey of more than 8,000 schools nationwide. Methodology, criteria, and weighting for the list were developed with the assistance of an Academic Advisory Board (AAB) consisting of educators from schools across the country.

To learn more, visit www.militaryfriendlyschools.com.

Boulder musician to perform “The Harp of Brandiswhiere: Suite for Celtic Harp”

“The Harp of Brandiswhiere: Suite for Celtic Harp” will be performed for the community at 7 p.m. this Friday, Sept. 16, at the CentreTech Campus. This special performance is free and open to the public.

Boulder musician Beth A. Cole will play the harp and Wayne A. Gilbert, Denver poet and CCA faculty member, will read the legend between the musical pieces.

An original piece by acclaimed harpist and composer Sylvia Woods, “The Harp of Brandiswhiere” is the musical interpretation of an old Celtic legend about two harpers, Brandiswhiere and his apprentice/true love, Telena.

New blog a window into the heart of CCA

Have you had a chance to check out CCA’s new blog? And the comments that go with it? Don’t miss out: visit http://www.ccaurora.edu/blogs/faculty-staff and join in the conversation. It’s an intriguing and convenient way to get to know the people who teach our classes, staff our offices, and are at the heart of the institution.

CCA “Green” tip of the month

Turn it off! According to the U.S. Environmental Protection Agency, the average bathroom faucet flows at a rate of two gallons per minute. The solution: turning off the tap while brushing your teeth in the morning and at bedtime can save up to 8 gallons of water per day, which equals 240 gallons a month!

Health and Wellness Fair

7:30-9:30 a.m., Oct. 3, Student Centre Rotunda. CCA employees and their family members may attend and access many free health screenings and services. Contact Debbie Irvine at 303-360-4823 to schedule appointments for blood screenings and/or flu shots.

World Mental Health Day

11 a.m., Oct. 10, Student Centre Rotunda. Students in Dr. Peggy Norwood’s PSY 249 class will present information from multiple world perspectives on statistics, myths and stereotypes, treatment options, resources, children and adolescents, and legal issues using iPads and other visual aids. Free and open to the public.

National Day on Writing

All day, Oct. 20, CentreTech Campus. A variety of events will be held throughout the day in celebration of the art of writing. Students, faculty, staff, and members of the community are invited to attend and participate.

See http://ccaurora.edu/news-events/event-calendar for more events.

Aurora Museum Foundation’s Antique Appraisal Fair

9 a.m.–3 p.m., Sept. 24. Aurora History Museum, 15051 E. Alameda Parkway, Aurora. Aurora’s version of TV’s “Antiques Roadshow.” The cost for appraisal is $5 per item, and each participant is limited to five items. Call 303-739-6705 by noon, Sept. 23, for a reserved event entrance time.

See http://www.auroragov.org for more events.